Public Utilities

Volume 55 No. 8 April 14, 1955

ARE PUBLIC POWER PROGRAMS IN THE PUBLIC INTEREST?
By Alexander M. Beebee

« »

Postmeeting Reports to Utility Stockholders
By Shelly Pierce

« »

Moving Platforms in New York Subway Transit
By S. H. Bingham

« »

The Vanishing Yardstick

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302 pressure-creosoted poles installed in 1928 ... *only one replacement* due to pole failure

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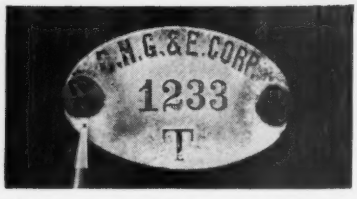

1929 dating nails on this pole are evidence of the long, economical life of pressure-creosoted poles.

John J. Sotanski, Central Hudson Estimator, inspects pressure-creosoted poles in the company's River Line which have been in the ground more than a quarter century and are still sound, according to recent boring tests.

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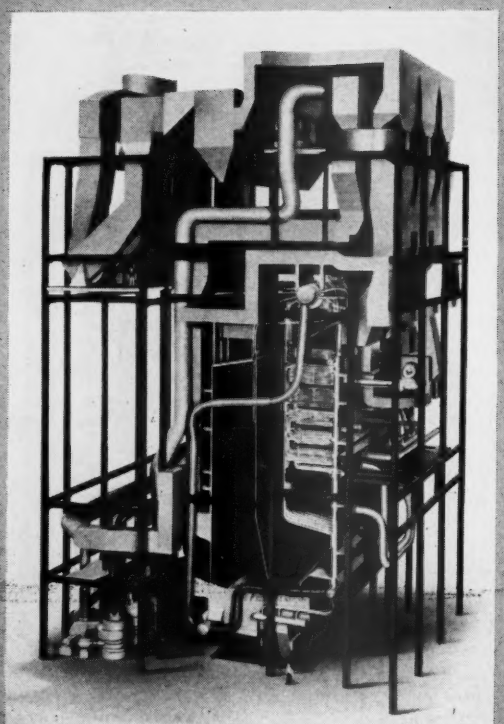
11 B&W Boilers help OVEC supply 15 BILLION KWHRS OF POWER FOR ATOMS



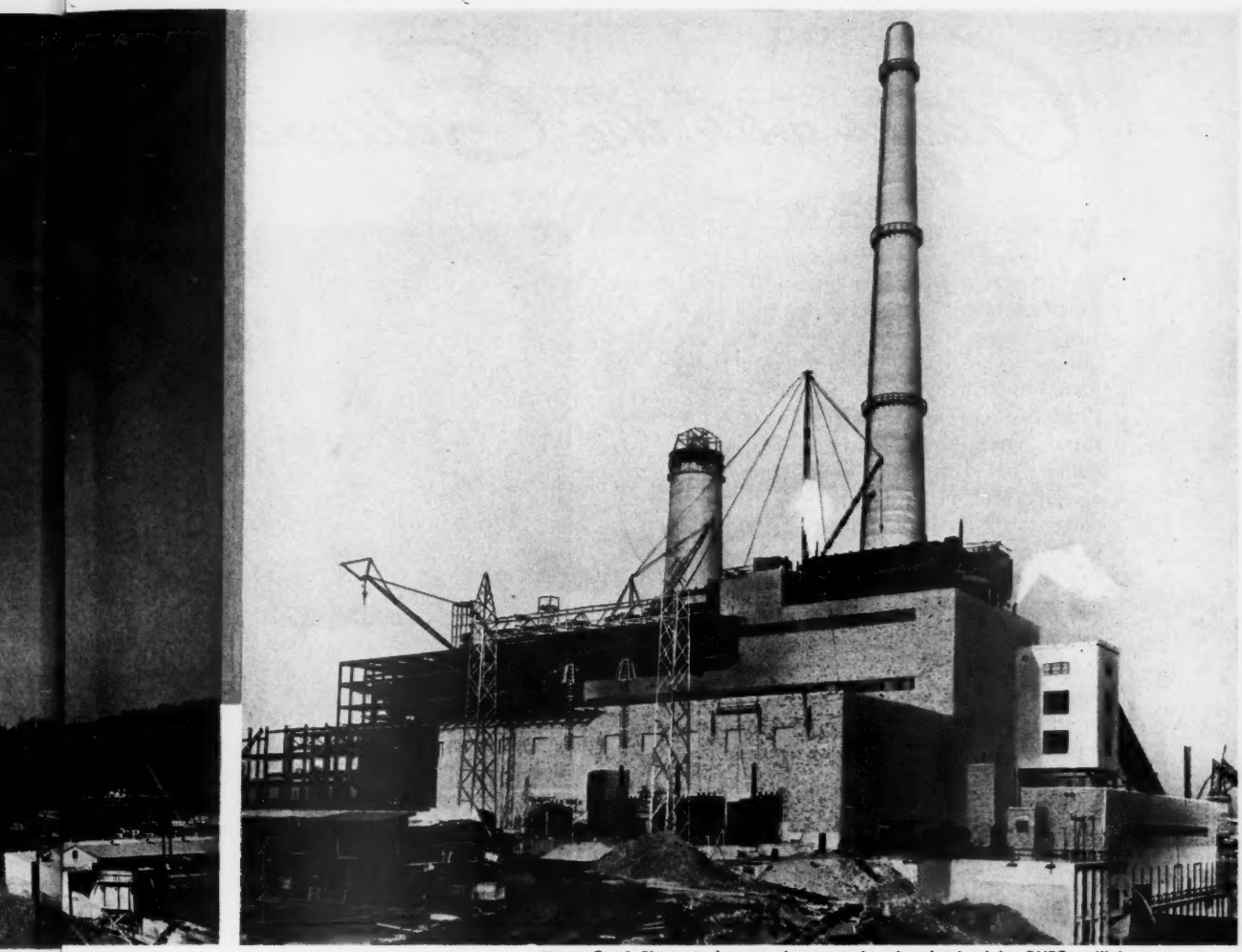
Eleven B&W Boilers of the type shown here will generate steam at the two new plants which will supply all electricity required for the great atomic production center known as the Portsmouth Area Project. It is the largest and perhaps most significant single undertaking in the history of the electric utility industry.

Clifty Creek Plant near Madison, Indiana, is scheduled for completion by the Spring of 1956. Unit No. 1 began delivering power in late January 1955. The Clifty Creek Plant will be owned, operated and maintained by IKEC. Its six units will have a total capacity of 1,200,000 kw—20 per cent larger than the Kyger Creek Plant. American Gas and Electric Service Corp. is the plant design engineer.

Once again America's private electric companies have demonstrated their resourcefulness. By combining their knowledge, skills and resources, 15 prominent utilities have accomplished a job of tremendous proportions quickly and efficiently—a job which would have been too big for any one company to handle.

By next year, two new power plants—now under construction as a result of cooperative planning by the 15 companies comprising Ohio Valley Electric Corp. and its subsidiary, Indiana-Kentucky Electric Corp.† —will be ready to supply more than the 15-billion kilowatt-hours of energy annually required for the process of uranium diffusion at the new Portsmouth Area Project. This huge block of power is greater than that used by New York City and is almost half as much electricity as is produced in all of France.

A number of factors relating to fuel, transportation and transmission were responsible for the choice of sites—both on the Ohio River—for the two power plants needed to meet this great demand. Now par-



Kyger Creek Plant—to be owned, operated and maintained by OVEC—will have five units with a total capacity of 1,000,000 kw. Unit No. 1 began delivering power in late January 1955, a full month ahead of schedule. The last unit is scheduled for completion by early 1956. Sargent & Lundy of Chicago is the design engineer.

tially completed, Kyger Creek and Clifty Creek plants will eventually have a combined capacity of 2,200,000 kw, and while Clifty Creek will be larger, the two plants will be similar.

Kyger Creek's five B&W Open-Pass Boilers will each produce 1,330,000 lb of steam per hr at 2000 psi and 1050 F, with reheat to 1050 F, and six B&W Boilers of the same type and size will furnish steam for kilowatts at Clifty Creek. The utilization of high temperatures, high pressures and reheat at both plants will place them among the most efficient and economical in operation. Together with a comparatively low fuel cost, this high efficiency rate will hold down the ultimate cost of the power produced there.

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Pages with the Editors

WE were given much food for editorial thought upon the occasion of our attendance at the opening hearings on the Harris-Hinshaw bills before the House Interstate and Foreign Commerce Committee. It was hard to believe that Chairman Kuykendall of the Federal Power Commission was actually appearing on the stand generally in behalf of legislation which would restrict the jurisdiction of his agency. That is an attitude which is not entirely new on the Washington scene. But it has been absent for a long time. In fact, we would almost have to go back to the early thirties to find instances of such regulatory self-abnegation.

ALEXANDER M. BEEBEE

PERHAPS it marks some sort of a cycle in the evolution of our regulatory commissions, from the judicial domination of the twenties, through the administrative proliferations of the thirties and forties, and now once again to the sobering manifestation of restraint in jurisdictional ambitions.

TIME was, back in the twenties, when federal commissions were inclined to resolve all doubts against their own jurisdiction. If you brought a complaint before the old Federal Trade Commission in those days, you had to be prepared to show and prove just how and why Congress intended that the commission should take jurisdiction over such a complaint. A good many were thrown out. Then during the thirties and forties the attitude of the commissions on challenged jurisdictional questions seemed to swing in the opposite direction. Commissions began to claim jurisdiction and more and more control in doubtful situations.

SHELLY PIERCE

AND then came the controversial Phillips Petroleum Company Case, in which the Federal Power Commission hesitated and then finally decided that Congress had never intended that it should regulate independent gas producers and gatherers. By this time the courts had gone further in the direction of liberal construction of jurisdiction than some of the commissions themselves. So, the U. S. Supreme Court last year reversed the FPC and required that it exercise the disputed controls under the Natural Gas Act.

NOW Congress is called upon to spell out, under the Harris-Hinshaw bills, jurisdictional restrictions which the supporters of these bills have always claimed that Congress intended should have been observed in the first place. What the outcome will be we do not profess to know, but it is certainly a novelty in these times

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to see the chairman of a federal agency asking Congress to delimit the area of its own jurisdictional authority. Readers may have noticed a somewhat similar ferment of self-restraint at work in some of the other federal regulatory agencies.

PERHAPS there are not enough swallows here to make a summer. But at least it would seem to indicate a shifting of the regulatory winds, compared with just a few years ago. We recall during that era the amusing construction placed upon the intent of Congress by an attorney for the Interior Department. He was asked to explain why the Interior Department had gone ahead with the building of a disputed transmission line when the House Appropriations Committee had expressly (in its report) instructed the department not to proceed with such construction. The Interior attorney pointed out that the Senate committee had given no instructions, one way or the other, about the line. Under such circumstances, he contended, the department was justified in using its own discretion and of course it went ahead with the project.

THE opening article in this issue on re-examining the public interest aspects of the public power programs, is written by an electric utility executive well known in two utility industries and not just his city, state, and profession, which is that of engineer. ALEXANDER M. BEEBEE, since 1947 president of the Rochester Gas and Electric Corporation, is a graduate of Cornell University (ME, '15), who joined his present organization as a cadet engineer in 1916. By 1927 he was general superintendent of his company's gas division, and by 1945 he was vice president, as well as director. At present he is also president of the Canadian Power Corporation. He has been exceedingly active in both gas and electric association groups and in many civic, charitable, educational, historical, business, and professional activities.

S. H. BINGHAM

* * * *

SHELLY PIERCE, whose article on the "Postmeeting Reports to Utility Stockholders" begins on page 423, is financial editor of the New York *Journal of Commerce* and a well-known writer on financial topics. Born in Pendleton, Oregon, he was educated at Stanford University (AB) and started his career in journalism in San Francisco. He came to New York city with the Associated Press and joined *The Journal of Commerce* in 1931. He has been financial editor since 1942, specializing in utilities, railroads, and open-end investment companies. On March 24, 1955, he was honored by the Annual Newspaper Writers' Award of the Federation for Railway Progress.

* * * *

COLONEL S. H. BINGHAM, whose article on moving platforms in New York city begins on page 430, is executive director and general manager of the New York City Transit Authority. He began his career in the transit industry in 1915 with the old Interborough Rapid Transit Company. During both World War I and World War II, COLONEL BINGHAM served the Army Engineers with much distinction and many honors, in assisting the transport and supply of our expeditionary forces abroad. Upon returning to civilian life, COLONEL BINGHAM was appointed general superintendent of the New York city transit system in 1946.

THE next number of this magazine will be out April 28th.

The Editors

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FOR BETTER USE OF POWER ON THE FARM

For a number of years there has been a tendency to think of rural electrification in terms of getting power to the farm. More recently it has become apparent that more emphasis might well be placed on getting the power on the farm after the farmers' lines have been connected with central station service. Relieving the farmer's wife of household drudgery through domestic appliances, and giving the farmer city comforts are worthy objectives. But James K. Smith, executive manager of the Kentucky Rural Electric Co-operative Corporation, tells of a new movement to step up the utilization of power on the farm to increase agriculture production. It is the Inter-Industry Farm Electric Utilization Council, of which the author is a member.

PUBLIC AND EMPLOYEE RELATIONS IN SOUTH AMERICA

Public utility companies operating in the United States admittedly have problems of their own in connection with employee training. But consider the problems of public utilities operating in Latin America where both the consuming population and the employees stand in need of instruction and advice on their utility operations—sometimes of a very elementary character. American & Foreign Power is rapidly expanding its business-managed utility enterprise in eleven Latin American countries with a combined service area population of 20,000,000 people. R. V. Sear, of Ebasco International Corporation, tells the story of how this utility group, with the aid of its service company, met the challenging problem of educating both its customers and its employees in the safe and effective use of electric service.

SHOULD PUBLIC UTILITY COMMISSIONERS BE ELECTED OR APPOINTED? PART I.

The question of whether public utility commissioners should be appointed or elected is an old one in the experience of public utility regulation in the United States. Furthermore, it is a question which still finds champions and much argument on both sides. While most of the state and all of the federal commissioners are appointed, the reasons which persuaded a number of states, mainly in the South, to stay on an elective basis are not to be discounted. Lincoln Smith, a scholar in regulatory research, has made a careful examination of the arguments pro and con and the relative performance of the appointed and elected commissions. In the first of his 2-part series he describes how the dual system began.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

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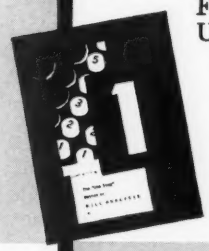

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Remarkable Remarks

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Vice president, Douglas Aircraft.

"It is the vast optimism and positive approach of private enterprise that make the outlook for the future so favorable."

G. KEITH FUNSTON
President, New York Stock Exchange.

"Let's don't kid ourselves. The reason more people are coming into the market is because of their confidence in it and because of business conditions."

JAMES P. MITCHELL
Secretary of Labor.

"It is my considered opinion that the level of work skills among our working people today has deteriorated dangerously and could perhaps imperil our survival as a nation."

HOLMES ALEXANDER
Columnist, Los Angeles Times.

"On the Dixon-Yates contract, the President acted with audacity and shrewdness—and he let the heathen rage! Dixon-Yates is good for America, although it's taking candy from some cry babies in TVA."

HAROLD W. DODDS
President, Princeton University.

". . . the humanities are the defenders and advocates of the ideals by which men live. They are therefore relevant to every problem which our nation confronts today. They uphold the banner of personal excellence against dictatorship by the mass mind in an age of mass production of goods and services, of mass amusements, and mass education."

EDITORIAL STATEMENT
The Wall Street Journal.

". . . to dedicate funds or specify purposes is not the way of good government. The burden of the taxpayers is already far too weighty; the budget is not yet in balance. Whatever revenues the federal government realizes through the offshore oil should go to the Treasury for use in the general affairs of government. Should these funds amount to considerable revenue on an annual basis, a tax reduction might even follow. The now harassed payer could then better afford to support his own schools in his own community. And that is the better way, no matter how alluring is the other."

FRANK SHALLENBERGER
Professor, Stanford University.

"Will automation create widespread unemployment? Technology has always created more jobs than it has destroyed. There will be temporary displacements but automation will come slowly and there will be opportunity for relocation, retraining, and adjustment. Expanding markets created by increased population, particularly in the elderly and younger nonworking ages, plus the defense program and commitments abroad, will in themselves require a high level of productivity and high degree of automation. Automation in itself will create new industries, expand the market for leisure products."

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RAYMOND MOLEY
Columnist.

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Excerpt from
Statement of Presque Isle (Maine) Chamber of Commerce.

"Good government is not a vague issue fought in far-off Washington, but is an issue that must be fought on main streets of our little towns and cities, and in the living rooms of citizens."

GORDON R. CLAPP
Deputy administrator, New York, New York.

"There are 7,000,000 men and women engaged in public service in the United States and they are being threatened by the pressures of our society towards conformity in belief and utterance. Conformity is becoming the price the individual must pay for his daily bread."

GEORGE M. HUMPHREY
Secretary of the Treasury.

"Confidence is a subtle thing . . . Businessmen either move forward with plant expansions—with the creation of news jobs—or they are cautious and restrained, based on confidence, and investors are perhaps more sensitive than any in governing their conduct in confidence that they have or lack."

EDITORIAL STATEMENT
Post-Intelligencer, Seattle, (Washington).

"There's just one difference between so-called public ownership and so-called private ownership, whether it's ferries, trees, or power. In private ownership the company gets the lumps when they come. In public ownership—with so few exceptions that they shine out—*You* get the lumps when they come."

FRANCIS K. MCCUNE
Vice president, atomic products division, General Electric Company.

"The more widely atomic information is distributed the greater the risk will be that some information will get into unfriendly hands. The acceptance of greater risks, it seems to me, follows logically from the decisions about private enterprise incorporated into the 1954 act. The principal justification for accepting such risks lies in a confidence in the potentialities of American industry."

WILLIAM MCCHESNEY MARTIN
Chairman, Federal Reserve Board.

"In my judgment, a properly functioning stock market is important in the attainment of a high standard of living and steady growth of employment opportunities for all people. We could not have our system of mass production and distribution if it were not possible for corporate enterprises to assemble through the securities markets varying amounts of individual savings into large aggregates of capital."

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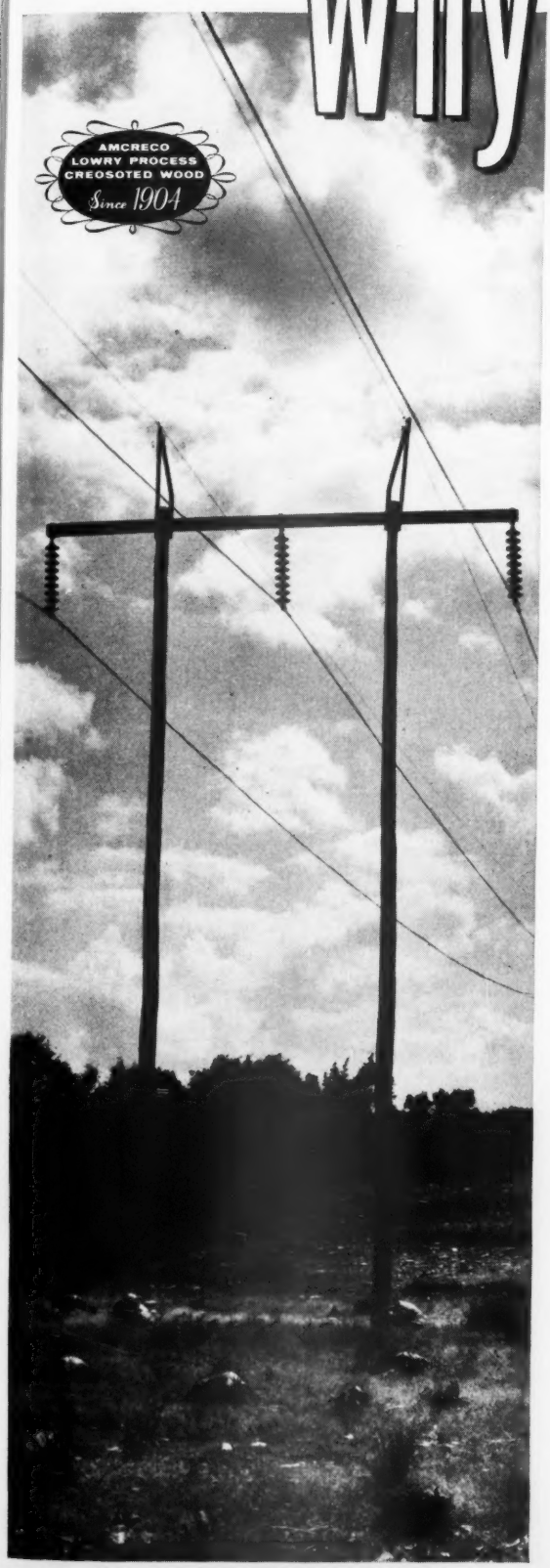

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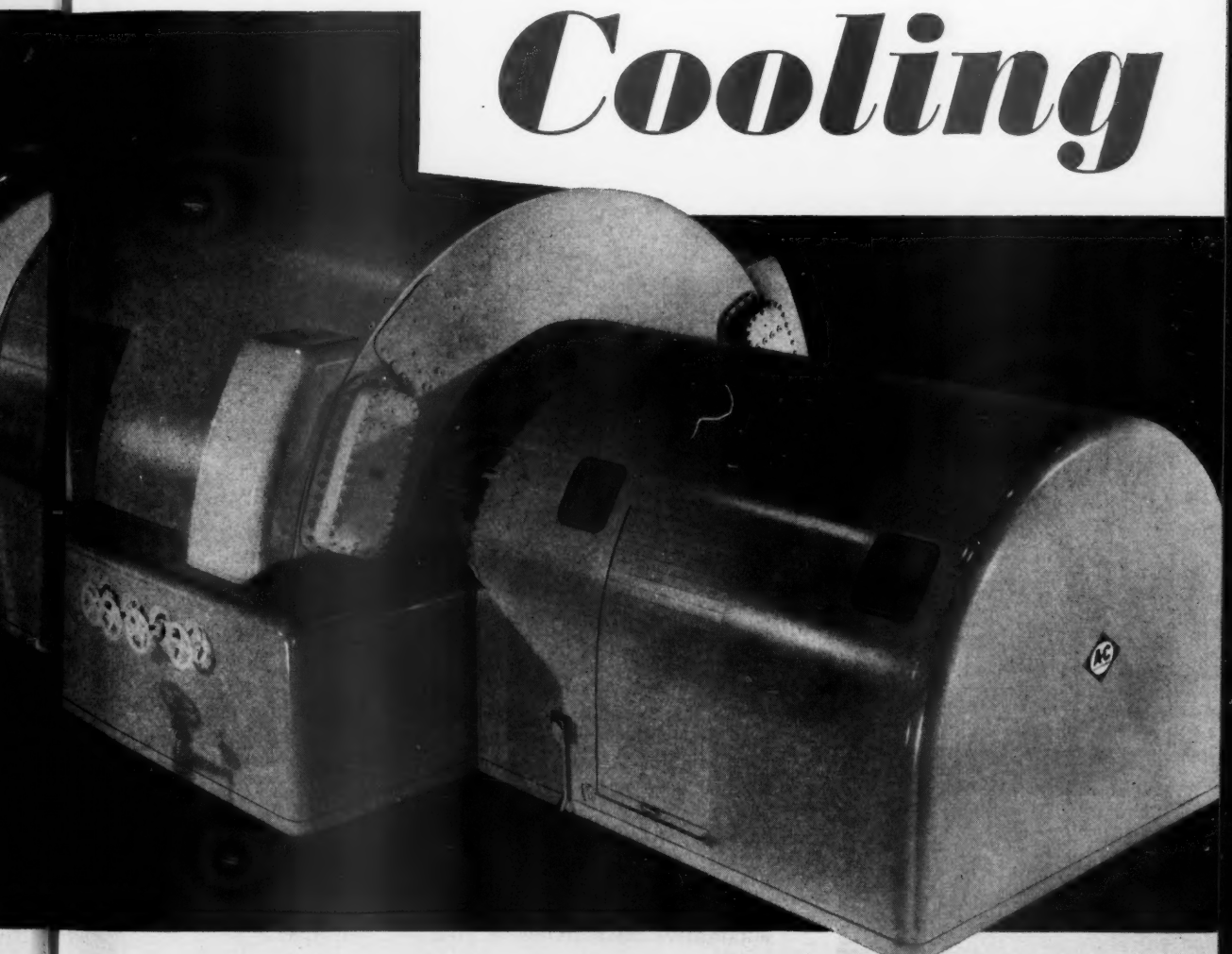

this Allis-Chalmers pioneered development lifts the lid off future increases to higher capacities.

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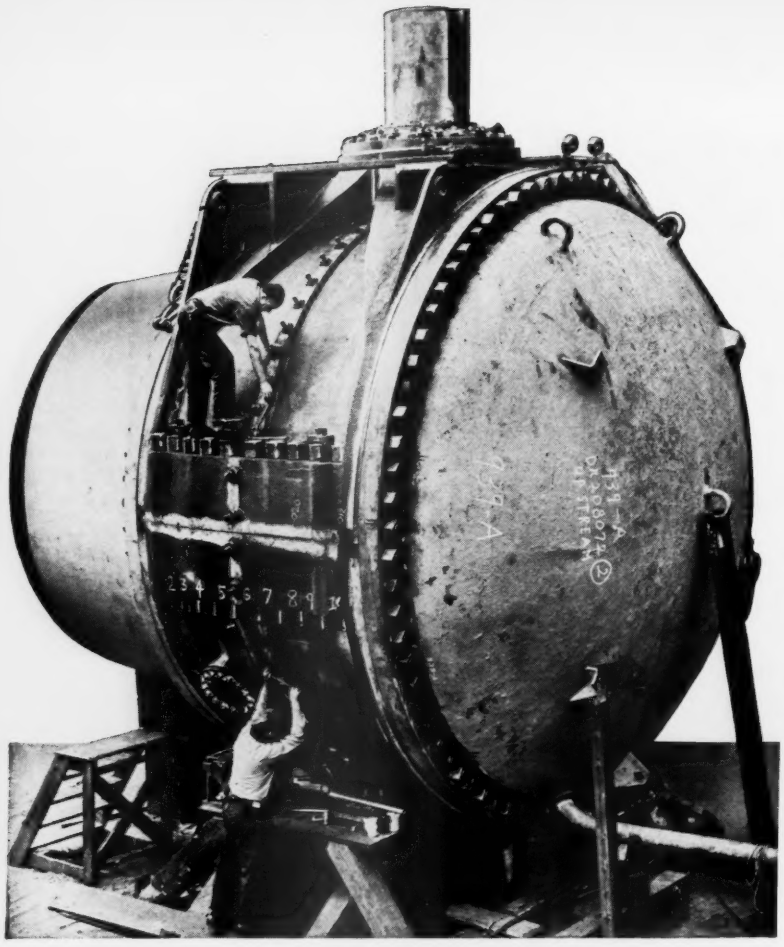

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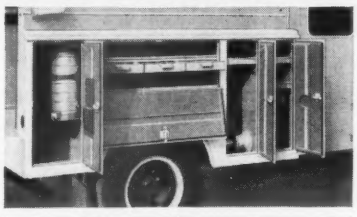

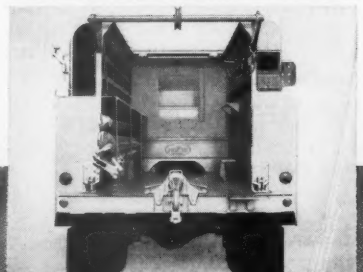

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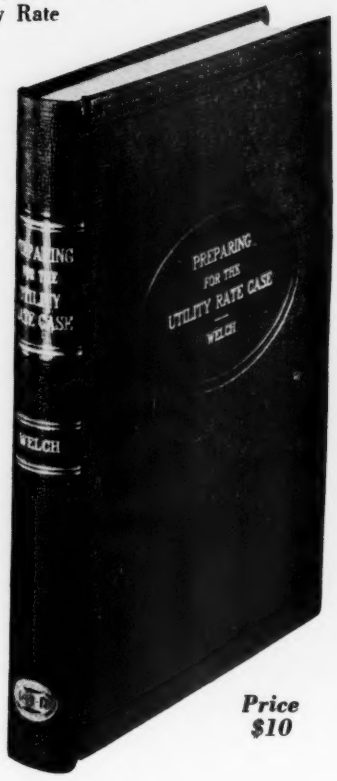

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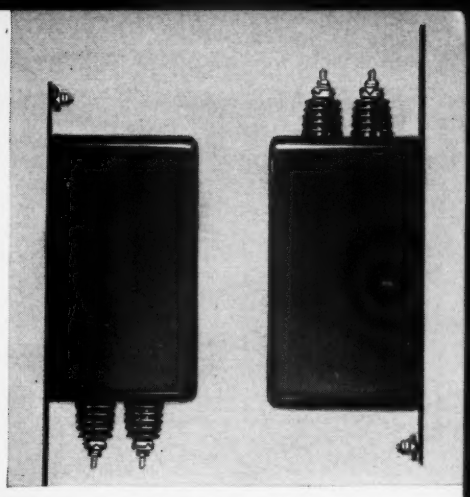

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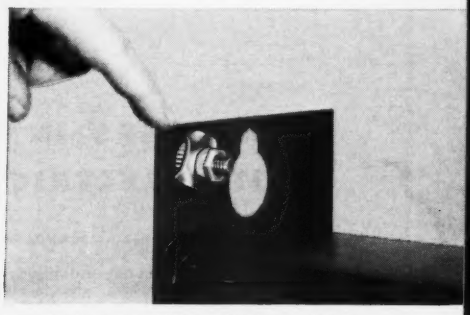

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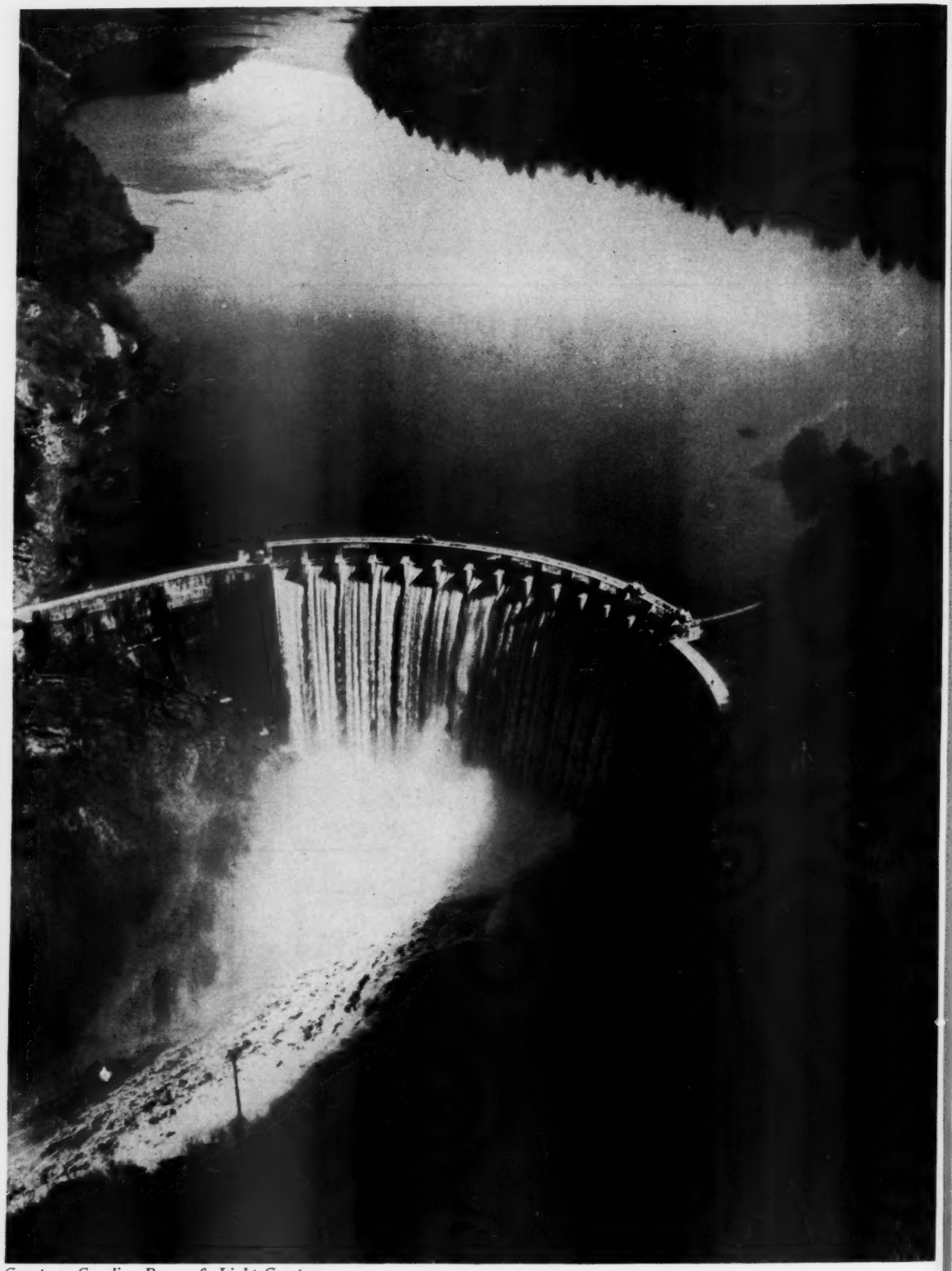
Thursday—14 *American Water Works Association, Arizona Section, begins meeting, Chandler, Ariz.*	**Friday—15** *Illuminating Engineering Society ends South Pacific coast regional conference, Los Angeles, Cal.*	**Saturday—16** *Chamber of Commerce of the United States will hold annual meeting, Washington, D. C. May 1-4.* ***Advance notice.***	**Sunday—17** *Rocky Mountain Electrical League begins annual spring conference, Denver, Colo.*
Monday—18 *American Society of Mechanical Engineers begins spring meeting, Baltimore, Md.*	**Tuesday—19** *Pacific Coast Gas Association begins distribution conference, Phoenix, Ariz.*	**Wednesday—20** *Indiana Gas Association begins annual meeting, French Lick, Ind.*	**Thursday—21** *American Management Association ends 4-day national packaging exposition, Chicago, Ill.*
Friday—22 *Northwest Public Power Association ends 3-day annual meeting, Eugene, Ore.*	**Saturday—23** *Liquefied Petroleum Gas Association will hold annual convention, Chicago, Ill. May 1-4.* ***Advance notice.***	**Sunday—24** *National Association of Electric Companies will hold annual meeting, Washington, D. C. May 5.* ***Advance notice.***	**Monday—25** *National Conference of Electric and Gas Utility Accountants begins, Chicago, Ill.*
Tuesday—26 *North Dakota Telephone Association ends 2-day annual convention, Fargo, N. D.*	**Wednesday—27** *Mid-West Regional Gas Sales Conference ends, Chicago, Ill.*	**Thursday—28** *Controllers Institute of America begins eastern conference, Toronto, Ontario, Canada.*	**Friday—29** *American Water Works Association, Montana Section, begins annual meeting, Butte, Mont.*



Courtesy, Carolina Power & Light Company

Hydro in the Great Smokies

The Walters station on the North Carolina-Tennessee border.

Public Utilities
FORTNIGHTLY

VOL. 55, NO. 8 APRIL 14, 1955

Are Public Power Programs in The Public Interest?

This author believes that the principles underlying our public power program have outlived their usefulness, no longer serve the public interest, and now result in perpetuating unequal taxation and opportunity of enterprise. To correct these inequalities, he proposes three steps: (1) to eliminate the so-called preference clause; (2) to make public power self-supporting and free of subsidy; (3) to abate the tax avoidance features of such operations.

BY ALEXANDER M. BEEBEE*
PRESIDENT, ROCHESTER GAS AND ELECTRIC CORPORATION

THERE is no doubt but that most, if not all, public power programs have been conceived with the highest of motives and objectives. Many people are loyal to them. Why then can they be challenged? Have conditions changed so that what may have been considered wise under earlier circumstances is not wise at the present time? To find an answer we must first consider some basic facts to form a background for our discussion.

We must remember that we are all part of a great democracy, and if a democracy is to work, grow, and prosper, it is vital that certain fundamentals be carefully established and respected, and that we understand the incentives and motivations that make it operate successfully.

It is perhaps discouraging to follow the path of history and see the inescapable fact

*For additional personal note, see "Pages with the Editors."

that all cultures of the past have flourished and then vanished from the earth. The remarkable ruins all over the world are silent testimony of the material progress that frequently developed, only to be obliterated. The question that instantly arises is: Will *ours* do likewise?

Surely I need not dwell upon the amazing material achievements of our present-day American economy. We have more and better homes; more and better food; and drudgery has largely been eliminated from industry and the home; conveniences unheard of in the past and even today in many other countries, are here commonplace. Why has all this been achieved? We, as a people, are no different from other races and other nations; human nature from prehistoric times has changed little, as reading the Old Testament quickly discloses. We, as a country, have been generously blessed, but we do not have a monopoly on natural resources.

If we reflect for a moment, we find that cultures of the past have largely been built on muscle power, the use of slaves, and the plunder system. On the other hand, our American economy has been built on the principle of freedom of thought and action, a reward of effort, an incentive to produce, and the wide use of energy to multiply the productivity of the individual.

To appreciate the effect of this latter factor, it is interesting to note that the muscle power of a man in prime health is only about equivalent to the energy needed to operate a 40-watt light, which can today be purchased for a year for $2 or less, depending on the classification of the service. In other words, the muscle power of a strong man can be purchased for a small fraction of a cent per hour, and much less than the cost of a single cigarette per day. The American worker with some eight to ten kilowatts available to him, has had his productivity multiplied by over 240 times through the use of tools and energy.

Recently a minister in Rochester made a statement which impressed me as best explaining why it is so important to preserve the principles of our American free enterprise system. He said:

> Selfishness may express itself in Socialism or Communism as fully as—or more so than—in Capitalism, because the authorities in a collective state have far more power over their fellows than in a free state. Unselfish service may express itself in Capitalism as well as or better than in Socialism or Communism. The profit motive may be selfish, but to obtain a profit one must render a service better than his competitors. Profits result from producing goods or services that people want, in better quality or in greater abundance, or at lower prices than others. Profit is the proof that a benefit has been conferred on society. It is a badge of merit, a medal of honor as evidence that one has done something for his fellows. A profit-seeker dare not be slothful—a bureaucrat *may* be and usually *is*.

I doubt if we can deny that one of the principal reasons for the startling accomplishment in this country has been the keeping alive of the natural drives in human nature in a constructive way, through a reward for effort with an incentive to produce. So far at least, we have been able to prevent the demoralizing effect of the modern method of the plunder system, in

which certain groups tend to live off the efforts of others.

Fundamentals of Power Generation

THERE is no denying the great importance of reliable low-cost electric power in developing the productivity of the individual, in relieving the burden of physical labor and drudgery, and in providing many of the luxuries and comforts of modern living. Electricity, gas, oil, coal, etc., are merely convenient forms for transmitting energy. Each has certain advantages.

Electricity, however, has many properties that make it particularly convenient in meeting the energy needs of our complex society.

Electric power can be made from any and all fuels, including the energy of falling water, and soon, we hope, from atomic energy. Historically, the energy from falling water has generally been somewhat cheaper than energy from fuels (except under unusual conditions) mainly because of the larger labor component in the cost and use of fuels. However, because some hydro power is cheap does not mean that *all* hydro is cheap. Great progress in the development of steam power generation has taken place through modern improvements in the thermal cycle used in modern high-pressure and temperature steam plants.

Where formerly two to three pounds of coal were needed to make a kilowatt-hour, present-day plants do so with less than three-quarters of a pound. A modern steam plant using coal can be built for around $150 per kilowatt of installed capacity, but to provide the fuel to make a kilowatt-hour will cost some three mills in most locations, which fuel cost a hydro plant obviously avoids. Keep that $150 figure in mind. Except for taxes and interest, the other operating expenses in modern plants, either hydro or steam, are only a small portion of the cost of the delivered kilowatt-hour.

Thus we see that the only advantage of hydro power over steam power is in the saving of the fuel cost. On the other hand, hydro plants are apt to cost more to build than a steam plant, as heavy construction hydraulic facilities are often involved, such as dams, etc. Thus there is a limit beyond which the cost of a hydro plant cannot go before the cost of the resultant power reaches the cost of power from a steam plant, which latter may frequently be located more convenient to the market for power.

THE added cost of hydro generation facilities over the $150 per kilowatt

¶ *"THERE is no denying the great importance of reliable low-cost electric power in developing the productivity of the individual, in relieving the burden of physical labor and drudgery, and in providing many of the luxuries and comforts of modern living. Electricity, gas, oil, coal, etc., are merely convenient forms for transmitting energy. Each has certain advantages. Electricity, however, has many properties that make it particularly convenient in meeting the energy needs of our complex society."*

of installed capacity which a steam plant requires, therefore must primarily be supported by the 3-mill fuel cost that hydro avoids. Roughly, in most cases this 3-mill saving in hydro operating cost will justify an added cost for hydro of $150 to $250 per kilowatt, depending on the method of financing. Therefore, when a hydro plant costs in excess of these figures, plus the $150 needed for a steam plant, or a total of $300 to $400 a kilowatt, a steam plant is generally cheaper. The above figures will of course vary up or down in locations where abnormally high or low fuel costs are involved. These very same fundamentals exist in the case of atomic power which, like hydro, tends to be a source of energy with a fuel cost less than coal but requiring larger investments.

HYDRO power is also subject to the vagaries of weather, and is often located far from the market for power, which means expensive transmission costs as well as involving the hazards that affect reliability of service. As a result, generally speaking, the farther the hydro power must be transmitted, the smaller are the investment figures discussed above that can be justified for a hydro development.

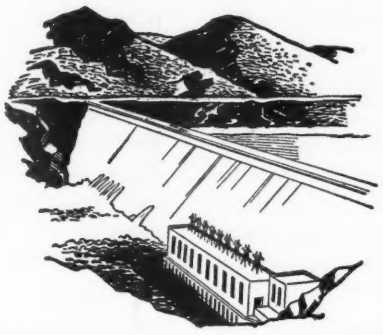
Now what is all this about? It means that hydro power has a definite place in the generation of electric power, but in spite of its spectacular appearance it has many problems, not the least of which is the variance in stream flow and rainfall. It means that the fundamental advantage of hydro power is definitely limited. Hydro power now and in the future can supply only a small part of the electric power needs of the country. Hydro is now in the neighborhood of 20 per cent of the total, and as time goes on it will become a smaller percentage as electric requirements increase, as they are bound to do.

Costs of Operation

IN a modern utility plant under private enterprise, the costs of the power include the usual operating costs, taxes, and the interest charges to pay for the use of investors' money. The distribution of electricity involves expensive facilities. Usually for every dollar spent in generating facilities, nearly $2 is needed to get the power to the customers. The plant investment per employee in a utility business is nearly six times that of typical American business. Generally speaking, it takes four years of sales revenue to equal the original cost of the facilities needed. This ratio of 4 to 1 is many times that of most American industry. Utility business, therefore, requires heavy investments.

Under present methods of electric utility operation under private enterprise, roughly 40 to 50 per cent of the revenue is required to pay taxes and carry the investment needed to serve the customers with electric power. Taxes alone take from 20 to 25 per cent of the revenue. Direct taxes alone on private utility operation are more than the cost of fuel, and are usually the largest item of expense, even being generally more than wages and salaries, except in certain areas. Again remember that the absence of fuel cost is the only advantage hydro has over steam.

The absence in hydro power of the entire cost of fuel required in steam-produced power, generally is only 10 to 15 per cent of the cost of most electric service, except in the case of large power loads. Hence this saving is not the great factor



Tax Avoidance and Local Subsidy

"While avoidance of taxes in a certain area may help that particular area, we must consider the 'drowning' effect on all enterprise in other areas that are forced to carry more than their share of taxes. It would seem that the time has come when this discrimination and subsidization should not be extended further and that such special privilege to a relatively few should stop. If such is not done, there will eventually come a time when the public power industry would have to assume its full burden of the tax costs of government. Under these conditions the whole fallacy of alleged cheap government power would be exposed, just as it has been exposed in France and England."

many think, as compared with the 40 to 50 per cent involved in taxes and investment costs.

If the people in areas adjacent to hydro developments are to save the cost of fuel in their power bills, should they in addition be allowed to avoid not only direct taxes, but indirect taxes, interest, etc., which most other sections of the country must carry in their cost of power? It is therefore easy to see why public power electric operations that can avoid taxes and save on investment charges, can make a tremendous reduction in the cost of power, no matter what the source of the energy may be.

It is primarily this tax-avoidance feature and lower interest charges again as a result of tax privileges, rather than the fundamental inherent advantages of hydro, that have often made it possible for public power programs to show surprising results that at first seem to be justified in the public interest. But why should these privileges be given hydro power?

In many cases of public power programs, hydro power was originally associated with flood control, navigation, and irrigation, and frequently was a by-product of such operations. Since some people claimed that private enterprise could not so readily become involved in these other phases, there developed a tendency for

such power projects to be publicly operated. I never could understand why the "partnership" idea, recently proposed by the administration, did not at that time receive stronger support. However, the ability of public power to avoid taxes and other burdens, was a persuasive item to the people involved. It was for all these reasons that in certain limited areas there grew up these public power programs of which we are all aware.

Of course, there have been many who felt that when electricity was produced as a by-product of other operations, it should be sold at its real commercial value so as to return the cost of the flood-control, navigation, and irrigation phases that much sooner, and so that other similar improvements also could follow more quickly.

However, I think you will agree this has seldom been done in public power. It has generally been the practice to sell the power on a preference basis and at costs that did not include many taxes and often did not consider interest as well. Such steps were justified by some who claimed that the electricity should be sold at a price which avoided these usual burdens, in order that the cheaper power would aid in stimulating the economy of the area involved. We will discuss this point further later on.

FROM all the above it is evident that the apparent great benefit that results in lower electric rates in these public power areas, is only indirectly and partly the result of hydro operation, but instead is primarily the result of avoiding taxes and other burdens which the great majority of other areas must carry and make up for. Furthermore, many of the large public hydro installations, if figured on a comparable basis as for a steam plant at the market, would show little if any saving, especially if reliability and continuity of service are considered. *We are therefore face to face with the inescapable fact that the problem is not one of engineering but one of political philosophy.*

Political Philosophy Is Involved

THE question is: Should these apparent great advantages of avoiding interest and taxes, be continued in the future for people in certain areas adjacent to publicly developed hydro sites, and should this policy be extended? Of course, the people in the so-called "benefited" areas that are now avoiding their fair share of costs, *are* fighting and *will* bitterly fight for the continuance of their special privilege. But does that make it economic or in the general public interest, especially when it tends to break down the system of incentives and fair play on which our whole economy is built, and which, as explained earlier, can be so easily thwarted and poisoned?

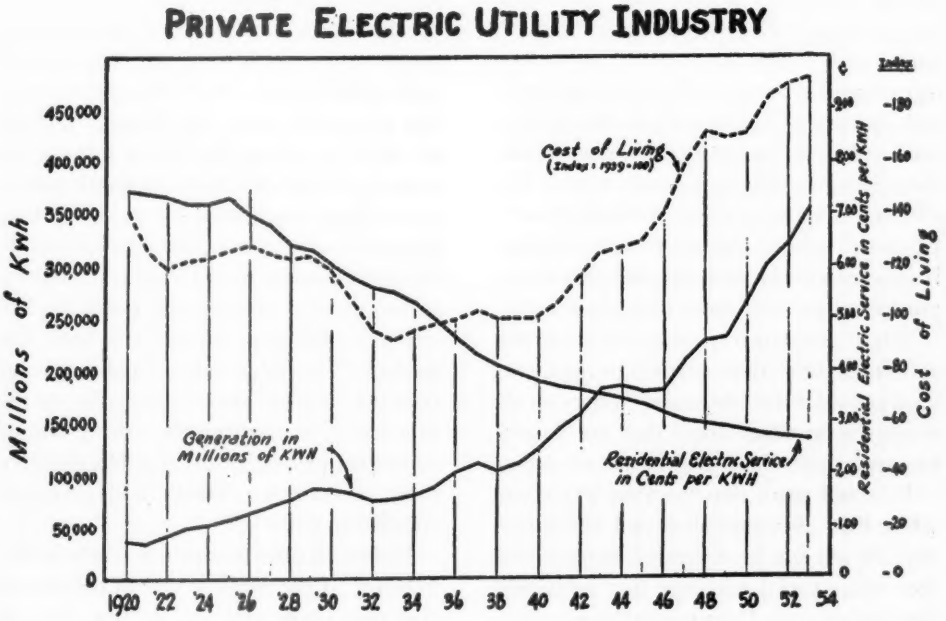
Let me explain further why these seemingly unfair conditions have been allowed to develop in the past. In the early days of this country, as well as during the depression, certain limited run-down or undeveloped areas were granted the subsidy of tax avoidance for definite reasons. The early days of the railroads and the TVA are examples. Some of these public power programs were born in the depth of the depression in an effort to "prime the pump" in those areas whose local economy was below that of the rest of the country. At those times taxes were relatively low and areas tended to exist unto themselves, since transportation facilities were rela-

tively costly and difficult. Under such conditions it was accepted by some that certain less-developed areas should receive subsidy through the avoidance of taxes and interest, to help them grow and raise their standard of living, to develop new territory, etc. The general public was not then concerned or aware that those privileges could later threaten the national economy or our form of government.

However, modern means of transportation—air, bus, auto, rail, and water—modern communication, and modern availability of energy with mass production, together with the ease of shifting location, have completely changed the picture. Modern roads and throughways and the auto, and even trailer homes, enable workers to easily move from one location to another. Taxes that formerly were a small portion of the cost of things, have both grown and multipled, and now constitute a *tremendous burden on all enterprise and development.* As a result, each area now tends to *compete with other areas for business in the national markets, as well as for the industries themselves.*

Therefore, under present conditions, if our national economy is to grow and prosper, it would seem that we must have *equality of opportunity and equality of taxation.* We must not have certain groups or areas avoiding their fair share of the tax burden of the country, enticing industry from other areas and competing with business outside their area.

A typical example is the "Niagara issue" in New York state. We now find state officials claiming that our industries in a fully



developed area like New York state cannot meet the competition of those areas that are avoiding their share of interest and taxes, and for this reason they claim that the state must develop the additional power at Niagara. Thus it is clear that the cancer of tax avoidance which now exists in only certain limited areas totaling some 12 per cent of the country, if not now stopped dead in its tracks, cannot help but grow and engulf the whole country. If we are not careful now it will soon be too late.

Why This Problem Is Such an Important One

If the customers of public power in New York state or in other localities, are to be given preferential treatment, why not allow taxes to be dodged in the stricken coal areas of Pennsylvania and West Virginia? If coal avoided taxes, why not oil and all minerals? Where does the chain reaction stop? Who will pay the lost taxes? The answer is that the over-all tax burden on other areas becomes that much greater, and collapse of the American free enterprise system is inevitable. We must think these things through. Lincoln said: "No nation can exist half free and half slave." Likewise, neither can our economy thrive if some groups avoid taxes and other areas are forced to carry more than their share.

While avoidance of taxes in a certain area may help that particular area, we must consider the "drowning" effect on all enterprise in other areas that are forced to carry more than their share of taxes.

It would seem that the time has come when this discrimination and subsidization should not be extended further and that such special privilege to a relatively few should stop. If such is not done, there will eventually come a time when the public power industry would have to assume its full burden of the tax costs of government. Under these conditions the whole fallacy of alleged cheap government power would be exposed, just as it has been exposed in France and England. However, the pathetic part is that it would then be too late. I would again emphasize that if there were complete tax equality there would be no public *versus* private power issue. In fact, you will recall that many proponents of public power have admitted they cannot exist without the subsidy of tax exemption.

I believe you see now why I am so concerned. If these subsidies are extended further in areas that are fully developed, then every other state in the Union is entitled to do the same thing, and socialization of the electric industry in this country just cannot be stopped.

Some have claimed that these power programs are not leading our economy toward socialization of the industry. I hesitate to use the word "socialism," and do not use it as an accusation, as I know the majority of those who favor public power do not favor Socialism, nor do I think that they want to see our country go socialistic. Nevertheless, Norman Thomas, who seems to me to be a pretty good judge of Socialism, said just within the last few weeks: "The advocacy of public power does not of itself make a Socialist, or the practice of it constitute Socialism. But of course the principle behind public development of power is socialistic, and it is rather childish to deny it."

Either all members of the whole power industry of the country should be allowed to avoid taxes and interest, or they all

No Check on Government Management

"THE operation under private enterprise is controlled in the public interest by an organization above and beyond the companies; namely, the public service commission. Under government operation, where is there any agency to check and prevent wasteful operation, special privilege, or politics in this important service to the people? Under public operation there is apt to be eventually created a powerful political influence under the sole supervision of the sovereign discretion of its appointed officeholders without redress or appeal."

should carry their fair share of these burdens. If the power industry is to avoid taxes, why not transportation? Why not food? Where will it all stop? We in the private utility business do not ask for special privilege—we feel that the people benefited from such programs should carry their fair share of the tax burden and not ride on the backs of others. We must begin to share the tax burden equally, not *avoid* it.

Other Claims of Public Power

THE following points have frequently been given for justifying public power programs. Let us analyze them:

a. Some have claimed that public power programs are necessary in order to provide a yardstick to measure the reasonableness of electric rates. I trust you will see from the preceding discussion, the folly of such reasoning. If a yardstick is to be used it must be 36 inches long. Such arguments can only lead to indignation and bitter feeling, and are absolutely no excuse in the problem.

b. Some few have claimed that public power programs are necessary because regulation of private utilities in the public interest has broken down. However, this argument always bothers me because if it is claimed that the public authorities (namely, the various regulatory commissions) cannot regulate successfully, how can public authorities be expected to oper-

ate such a program successfully? Furthermore, I call your attention to the curves on the chart (page 415) showing the continuous decline in the cost of residential electric service in recent years in spite of the doubling of the cost of living during these past thirty years. Such results certainly could not have been achieved if regulation were as ineffective as some would lead us to believe. We in the industry, under regulatory commissions, know firsthand how vigorous and stern are regulatory procedures. Yet we realize that in return for the franchises entrusted to us, regulation is necessary, and we welcome strong regulation. Our only qualification has always been that it should be fair to the consumers and the investors alike.

SOMETIMES it has been claimed that the phenomenal result in the constantly decreasing cost of residential electric power shown in the chart on page 415, has been brought about because of the competition of public power programs. A glance at the chart, however, will show the fallacy of this argument. Residential electric costs have consistently declined, and the introduction of public power programs in the early thirties had absolutely no effect on this already established trend.

c. One other factor that impresses the private power industry as being most unfair, is the insistence of those supporting public power programs that they continue the so-called "preference provisions" under which the power from public power plants must be disposed of on a priority basis to municipalities, co-ops, and other tax-avoiding groups, even though they may be located farther away, often at uneconomic distances. I am sure you will agree that such provisions are primarily for political advantage and can only lead to further socialization of the power business. As each area becomes so privileged to avoid taxes and other burdens, other areas in defense are forced to say "Me too!" It seems that such a policy no longer has any purpose in America as it exists today. We might even say that if any preference is to be given, it seems that it should be to those taxpayers who have helped to put up the money, and not to those who avoid their fair share of taxes. But again I say—all that the private power industry asks for is equality.

d. Another development of some public power programs impresses us as having doubtful value in the public interest. Recently, in their desire to avoid some of the criticism of "living off" taxes from other areas, they have suggested financing their programs through the issuance of tax-exempt bonds. The New York Power Authority recently issued $335,000,000 in tax-free bonds for the St. Lawrence power development, and was proud of its achievement as being in the public interest. Who bought those bonds? A person with a $50,000-a-year income would buy those bonds in preference to a business investment that would yield 13 per cent—another case of tax avoidance by a group that generally should carry its share of taxes, thus again benefiting a few at the expense of the many under the guise of public interest. These lost taxes, of course, must be made up by others.

I WAS interested to read in a recent book by Professor Vernon Mund of the economics department of the University of Washington in Seattle, entitled *Government and Business,* a very interesting statement on this same subject. While I

cannot agree with some of the points he raised in his book in defense of public power, I could not help but applaud when he said:

> The main argument for the issuance of tax-exempt securities is that a governmental body is thereby able to borrow at lower rates of interest. This argument is undoubtedly true. With a system of progressive income taxes, however, the loss in tax revenue from persons with high incomes who buy such securities possibly is much greater than the saving in interest cost. A glance at the advertisements for tax-exempt securities will show that persons with high incomes investing in tax-exempt securities possibly are able to secure a higher net return on their capital than persons of moderate means who buy defense savings bonds. The practice of tax exemption may consequently serve to benefit persons of wealth more than the borrowing public. Tax exemption, therefore, does not appear to be a sound policy with the steep progressiveness in federal income tax rates which presently exists.
>
> In older days we all know there were many crimes committed in the name of religion. When I hear some of the claims of public power programs I feel that the modern version is to commit economic crimes in the name of "public interest."

Results under Private Operation

Now let us look at the other side of the picture and see what privately owned utility operations under regulation have to offer that would seem to be in the public interest.

Under private enterprise the following benefits automatically result:

Everybody Is Treated the Same. Private enterprise, under regulation by the public service commission, supports the principle that the people benefited carry their fair share of the tax burden and do not become a burden on other taxpayers, and that everyone is treated the same. Under private operation the license fees for the use of the water for hydro power and the taxes paid, mean that all the taxpayers share in the benefit and no special privileges are conferred on a few at the expense of the many. In other words, all the citizens share in the benefit from the development, not just those who happen to live within transmission distance from the electricity developed.

Electric Service at Lowest Cost to Customer. The customer gets his electric service at the lowest cost when all costs are included. It must be remembered that under regulation by a public service commission, there is no "profit" as the word "profit" is usually understood. Such operations are on a strict "cost-of-service" basis, and only enough is allowed to be collected to pay

¶ "*. . . many of the large public hydro installations, if figured on a comparable basis as for a steam plant at the market, would show little if any saving, especially if reliability and continuity of service are considered.* WE ARE THEREFORE FACE TO FACE WITH THE INESCAPABLE FACT THAT THE PROBLEM IS NOT ONE OF ENGINEERING BUT ONE OF POLITICAL PHILOSOPHY."

the operating expenses, taxes, and a fair return on the money invested less depreciation, as interest on the money put into the business by the public.

Operations Are Controlled in the Public Interest. The operation under private enterprise is controlled in the public interest by an organization above and beyond the companies; namely, the public service commission. Under government operation, where is there any agency to check and prevent wasteful operation, special privilege, or politics in this important service to the people?

Under public operation there is apt to be eventually created a powerful political influence under the sole supervision of the sovereign discretion of its appointed officeholders without redress or appeal.

Other Factors Bearing on This Subject

In view of the discussion given above, we are now in a position to consider some of the points that have recently been made on this subject:

Private operation has been accused of being greedy and desiring to "make a grab," moved by the desire to make an undue profit for a few at the expense of the many. Let us see what the facts are. Proponents of public power are prone to claim that such water resources belong to all the people and should be used for their benefit, not just for a few. But under public operation is not just the reverse of this objective achieved? Public power in reality gives preference to certain groups near the development at the expense of the many, while private operation, through the taxes paid by those benefited and the license fees paid for the right to use the water, really benefits all the people through lower taxes, not just a few who happen to live nearby.

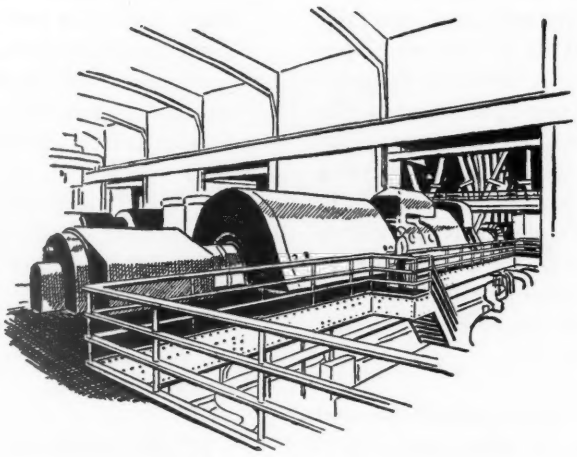
Therefore, from all the above it seems clear that commission-regulated private operation of such developments as we are here discussing, in reality brings the benefit of these natural resources to "all the people" to whom they belong, and not just to a few. It would seem that private operation better achieves the objectives that many have claimed were the aims of public power.

As our country develops automation with the use of electric power, the factors discussed above become of increasing importance. In a truly automatic world, power is the mainspring, and certain areas should not have this vital necessity at a discount while others are penalized.

At the present time the cost of electric power in most industries is but a small fraction of one per cent of the value of the finished products, and in the home it represents less than one per cent of income of a family. The points I have discussed may not have been so important in the past, but today and as time goes on they will become increasingly important, and now is the time to correct them before it is too late.

Some proponents of public power have claimed that tax acceleration provisions of recent laws have given tax advantages to private operation. But here again it must be remembered that such taxes (as are temporarily delayed in payment) must later be paid back and perhaps in increased amounts. It is a gamble that each company takes.

However, such benefits (if they really *are* benefits) are available to all, not just to people in certain areas, and thus everyone is being treated the same. Again I would emphasize that such taxes are not



The Scale of Utility Taxes

"UNDER present methods of electric utility operation under private enterprise, roughly 40 to 50 per cent of the revenue is required to pay taxes and carry the investment needed to serve the customers with electric power. Taxes alone take from 20 to 25 per cent of the revenue. Direct taxes alone on private utility operation are more than the cost of fuel, and are usually the largest item of expense, even being generally more than wages and salaries, except in certain areas."

excused; they are merely delayed, so as to help the industry throughout the whole country expand and prosper. This is quite different from giving special benefits to certain groups.

What Does All This Mean?

THUS it is clear that while cheap power is a great benefit to a community (which I do not deny if it really *is* cheap), nevertheless we should be careful not to set up conditions that tax the existing purveyors and users, and thus be misled into spending taxpayers' money to build facilities that escape those taxes.

Conclusions

FROM all the above, you can readily see why I feel we are here considering some very important factors, and why under present conditions I am concerned as to the future of our country. Under the guise of public interest, some public power policies are now in vogue that impress me as actually having the opposite effect, since they tend to benefit a few at the expense of the many through the avoidance of taxes and other burdens which the rest of the country must carry and make up for. The following points would seem to be worthy of careful consideration:

1. The absence of a cost for fuel in hydro power operations generally represents from 10 per cent to 15 per cent of the cost of delivered domestic and commercial power, and there may be some justification for the people adjacent to such developments receiving this benefit in their power bills. However, in addition they should not be allowed to avoid part or all of the tax and interest charges which total nearly 50 per cent of the delivered power costs in other competing areas.

2. While certain interpretations and provisions of public power programs may have had some justification at the time they were conceived, under present-day conditions they have outlived their intent and usefulness and give undue preference to people in certain areas and actually defeat the very objective on which they were originally based. They should be revised.

3. When private enterprise does not stand ready to develop natural hydro resources, either as part of multipurpose projects or otherwise, we cannot criticize government for stepping in and doing the jobs which are economically sound. However, if done, such power, whether by-product or otherwise, should be sold at a fair price, including its share of the tax and interest burden, thus giving the benefit to all, and not to only a few.

4. Power from flood-control and other multipurpose projects must not be made to appear cheap by avoiding burdens which all other enterprises must carry. By selling such power at its fair cost, the collateral benefits of multipurpose projects will be paid for that much quicker, stimulating further reduction in taxes and expansion of our economy.

5. The "preference" provisions of present public power programs which benefit groups that also avoid taxes, completely defeats the objective of benefiting all the people, and should be eliminated. Everyone should be treated the same.

6. Under modern conditions with each area competing with other areas not only for markets but for industries as well, certainly our economy has reached a stage where avoidance of taxes and interest by certain groups should not be expanded further. If our economy is to grow and prosper we should strive for *equality of opportunity* and *equality of taxation.* Efforts should be made to correct the situation before it is too late, while it involves only some 12 per cent of the country. If expanded further in fully developed areas, then every other area and every other industry is entitled to do the same thing. Then where will taxes come from?[1]

[1] These six points are substantially identical with the findings in the splendid study on this subject submitted July 1, 1950, by the Engineers' Joint Council, digested in PUBLIC UTILITIES FORTNIGHTLY, July 20, 1950, page 76. We should do all we can to support them. These principles are also in accord with the recent "partnership" recommendations of the Eisenhower administration, which has taken a courageous stand in this matter, and which as time goes on we feel will clearly demonstrate its wisdom as being in the public interest.

I have often said, if the people really understand this problem I have no fear as to the result.

Postmeeting Reports to Utility Stockholders

With the modern trend to widespread holdings of stock in public utilities, many a stockholder finds it inconvenient or impossible to attend the company annual meeting. Realizing this, there has been a growing effort on the part of utilities to keep stockholders informed on what has taken place at their annual meetings. In these days of tremendous facility expansion and the concomitant seeking of capital funds, informed stockholders are real assets.

By SHELLY PIERCE*

With the broadening of stock ownership, more and more corporations, including most public utility companies, are sending an account of their annual meeting to their shareholders.

The meeting itself is one of the few, if not the only, direct contacts the average company has with the bulk of its stockholders. However, it is not feasible for all the share owners to attend this gathering. Even if the holders were all within easy reach of the meeting, which is generally not the case, a company with thousands of stockholders could not find a place big enough to accommodate them all.

Some companies have tried to bring the meeting to the stockholders by the device of holding a series of regional gatherings in various parts of the country. But at best, only a small percentage of a corporation's stockholders can be reached in this manner.

As stockholder lists have grown there has come a demand from some share owners for more information about the company's activities, including requests for an account of what has transpired at the annual meeting.

Consequently, a marked trend has de-

*Financial editor, *Journal of Commerce*, New York, New York. For additional personal note, see "Pages with the Editors."

veloped in the postwar period of more and more companies sending out some information on the annual meeting.

While the practice is being more widely adopted, there is little uniformity in the method by which it is being done, however. Some utility companies incorporate an account of the meeting in a quarterly letter to shareholders, which usually goes out with a dividend check. The information given may be confined to a summary of the chairman's or president's remarks. Or it may be amplified with some details of the discussion which followed the address of the company's head.

Then, there are corporations which issue a separate booklet containing the meeting account. This may include only the remarks of the chief executive of the company or it may also give some details on what else transpired at the meeting. A sampling of postmeeting reports of utility companies in various parts of the country indicates that while some of them treat the meeting account in this manner, the more usual practice is to make it part of the quarterly letter.

SINCE 1944, Consolidated Edison Company of New York, Inc., has been telling its 160,000 shareholders about its annual meeting in a special issue of *News and Views,* the stockholders' quarterly.

"We feel that this gives us one more opportunity to keep the stockholders informed on company activities and company policies," says Harold S. Sutton, treasurer of this utility, which meets the electric and gas needs of New York city.

"These remarks pick up where the annual report leaves off and bring company news up to the date of the meeting, which is the third Monday in May.

"Of our 160,000 stockholders, only about 400, on an average, attend the meeting. But we feel that the rest of the stockholders ought to know what has been said. Accordingly, in addition to reproducing the prepared remarks, we summarize questions from the floor, together with the answers, in cases where the subjects are of general interest to the stockholders. Unfortunately, the majority of questions at the meeting did not fall into this classification."

AMERICAN TELEPHONE AND TELEGRAPH COMPANY, which has been giving its shareholders a summary of its annual meeting for about ten years, formerly sent it out in a special booklet. This was mailed in the envelope containing the next dividend check following the meeting.

The pamphlet, 8 inches long and 3½ wide, contained eighteen pages. In it, in addition to the remarks of the president, was a report on the vote on any proposals before the meeting, as well as an account of the discussion. This included answers to any questions from the floor.

In 1952 the format was changed and since then the postmeeting report has been incorporated in the *Share Owners' Quarterly.* This 8-page publication, 9½ inches x 7¼, contains essentially the same information which was given previously in the special pamphlet.

The telephone company utilizes the *Share Owners' Quarterly* as a tool for improved communications with its more than one million stockholders. S. Whitney Landon, secretary of AT&T, told the annual meeting of the American Gas Association last October, in a discussion of stockholder relations, that the company tries to find

something of interest in the operations of the company to include with the financial reports for the quarter which are published in the *Quarterly* and which go out with dividend checks.

"These quarterly inserts serve to foster the feeling among the stockholders that they know what is going on and are a part of the undertaking," Mr. Landon told the gas group. "From the large number of letters we receive from stockholders, it appears that they are happy to receive this material."

The AT&T recently included in a *Share Owners' Quarterly* a few definitions of financial terms, such as debentures, bonds, stock coupons, warrants, etc. Mr. Landon reported that this had had a "tremendous reception" and he was deluged with letters and telephone calls.

COMMONWEALTH EDISON COMPANY of Chicago is another utility which has been issuing postmeeting reports for ten years. For the past several years the report has been in the form of a small 14-page pamphlet which contains the remarks of the chairman.

"It should go without saying that stockholders, as owners of a business, are entitled to all the information about the affairs of the company that it is practical to send them," says John W. Evers, president. "For a corporation as large as Commonwealth Edison Company, with more than 130,000 stockholders, the expense of preparing and mailing communications must be considered."

This cost factor is something which executives must take into account when considering the mailing of any communication to stockholders. For a company such as AT&T, with its more than one million shareholders, this can be an item of considerable expense. It means not only the printing of better than one million mailing pieces but the postage on them as well, every time something is sent out. That is why many companies find it expedient to send out postmeeting reports with dividend checks on which postage must be paid anyway.

In order to cut the cost of mailing its postmeeting report, the back cover of the Commonwealth Edison report contains space for an address plate as well as a postage paid imprint. This reduces the amount of handling necessary in sending out a report and saves the cost of envelopes.

SOME companies utilize the report of the annual meeting as a means of dramatizing problems facing the management. Columbia Gas System, Inc., is a utility company in this category.

Dale Parker, secretary, points out that due to space limitations and the multi-

¶ *"IN the last year or two some companies have conducted surveys in connection with their postmeeting reports to determine what kind of reception they get from stockholders. The surveys show that they appreciate receiving such reports. However, there are indications that the shareholders are just as pleased with leaflets giving details of the meeting in brief as they are with more elaborate reports."*

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plicity of subjects covered, the quarterly and annual reports leave little room for a full-scale discussion.

"For that reason, among others," he explains, "Stuart M. Crocker, chairman, and George S. Young, president, have undertaken to use the annual meeting as a sounding board. Their remarks have been recorded, edited, and printed in booklet form and mailed to all Columbia stockholders.

"This has not occurred every year. But it has occurred frequently enough to keep our stockholders informed in detail about the various gas supply, rate lag, and earnings crises that our management has been forced to meet."

MR. PARKER also has some constructive ideas on what a report of an annual meeting should contain.

"In general, I believe that postmeeting reports to stockholders should be tailored in the stockholders' interest. I do not believe they should be verbatim reports, because there is the necessary legal routine that, at best, is dull reading.

"The amount of stock represented at the meeting in person and by proxy—and how it was voted—should be reported to the press immediately and to the stockholders as soon as possible. Any unusual occurrence at the meeting should also be reported objectively to the press and included in the stockholder communication."

Mr. Parker's distaste for verbatim reports apparently is shared by most stockholders, as the experience of several corporations indicates. As will be shown later in this article, some companies have offered to send the transcript of the proceedings to their shareholders but have received few requests for it.

THE Southern Company has been sending out an account of its annual meeting since 1950. For the first three years it was a 4-page leaflet. This was expanded in 1953 and the report of the 1954 meeting was expanded still further.

Last year, for the first time, Southern's meeting report contained a number of illustrations, including one of the Yates plant, generating plant of the Georgia Power Company, fifty miles southeast of Atlanta. There was also a picture of Governor Herman E. Talmadge of Georgia making the welcoming speech to the more than 500 stockholders from eighteen states who were present.

According to J. F. Crist, vice president, the company had "an excellent reaction" from the expanded report of the 1954 meeting.

"We feel," he says, "that postmeeting reports offer a valuable means of keeping stockholders informed, not only of the action taken at such meetings but also of the general situation so far as the company's business is concerned.

"In recent years our stockholders' meetings have been held within our system's service area, generally at one of our large steam or hydro-generating plants. This enables the stockholders—many of whom come from distant places—to see at firsthand the nature of the territory served and some of the system's major installations and also to meet the system's principal executives. From comment of stockholders not in attendance at the meetings, we believe that the postmeeting reports, principally the one sent out last year, are read with interest and appreciation."

AMERICAN GAS & ELECTRIC COMPANY sent out a report of its 1954 meeting

Postmeeting Reports

"An analysis of the leaflets prepared by Detroit Edison since 1950 on the annual meeting shows that the coverage ranged from three paragraphs to several pages, depending upon whether anything came before the meeting which was considered of sufficient importance to report. . . . according to L. C. Provencher, assistant secretary of Detroit Edison, the practice of sending out postmeeting reports is good 'not only from the point of view of keeping them informed, but since stockholders representing about 80 per cent of our shares outstanding show interest enough in the company to send in proxies, they are entitled to the courtesy of telling them what transpired.'"

in a separate booklet, along with the dividend check. The first two pages are devoted to an account of action on proposals presented at the meeting. This was followed by the text of the remarks of Philip Sporn, president.

K. C. Christensen, treasurer, Pacific Gas and Electric Company, believes that postmeeting reports "are very desirable in certain circumstances, particularly where controversial issues may have come before the meeting."

"In our own case, however, in the absence of controversial issues and because of the largely routine character of our meetings," he adds, "I do not think there is any real need for a postmeeting report beyond that which we carry in our quarterly letters."

PG&E issued two meeting reports in 1954. One was in the quarterly letter which followed the annual meeting April 13th. The other came after a special meeting in July, which approved the merger agreement between the utility and the Pacific Public Service Company.

Only three paragraphs were devoted to the annual meeting in the quarterly letter which carried this account, as the session was largely routine in nature. However, the report of the special meeting on the merger took up about half the space in that quarterly letter.

Cleveland Electric Illuminating Company and Detroit Edison Company are other examples of utilities which confine their brief accounts to the quarterly

letter. In both instances the proceedings are usually routine and the attendance small.

An analysis of the leaflets prepared by Detroit Edison since 1950 on the annual meeting shows that the coverage ranged from three paragraphs to several pages, depending upon whether anything came before the meeting which was considered of sufficient importance to report.

While there is usually little to report, according to L. C. Provencher, assistant secretary of Detroit Edison, the practice of sending out postmeeting reports is good "not only from the point of view of keeping them informed, but since stockholders representing about 80 per cent of our shares outstanding show interest enough in the company to send in proxies, they are entitled to the courtesy of telling them what transpired."

For many years the annual meeting of International Telephone & Telegraph Corporation was held in Baltimore, Maryland, and it usually was a routine affair. Then, in 1953, it was held in Nutley, New Jersey, on the grounds of Federal Telecommunications Laboratories, Inc., the company's domestic research subsidiary. For the first time, it drew a large crowd, there being more than 700 stockholders present.

Also for the first time, the company issued a postmeeting report. A display of products of various subsidiaries was held in connection with the meeting and this provided an opportunity for a number of pictures with which the report was illustrated.

Last year IT&T held its meeting in a hotel in New York city and there were over 1,500 present. The management again put out an account of the session. This report contained more details on what had transpired at the meeting than did the report of the one held in Nutley.

In the last year or two some companies have conducted surveys in connection with their postmeeting reports to determine what kind of reception they get from stockholders. The surveys show that they appreciate receiving such reports. However, there are indications that the shareholders are just as pleased with leaflets giving details of the meeting in brief as they are with more elaborate reports.

Socony-Vacuum Oil Company mails its stockholders a summary of the remarks of the two top executives of the company at the annual meeting, with a notation that a transcript of the proceedings is available upon request. In the past two years less than one hundred of the company's 175,000 shareholders have asked for it each year.

General Motors sent out a brief report last year, along with an offer of a summary of the proceedings, as well as the text of the remarks of Harlow H. Curtice, president. Relatively few replies were received.

Standard Oil Company of New Jersey sent out a reply card with its meeting report last year on which stockholders were asked to indicate whether they desired to continue receiving it. The company received replies from 15 per cent of its 284,000 stockholders. Of those replying, 76 per cent said they desired to continue receiving it. It is believed that some did not want it because they already were getting a copy from some other source, such as another member of the family who was also a shareholder.

POSTMEETING REPORTS TO UTILITY STOCKHOLDERS

THE pamphlet containing the remarks of James F. Oates, chairman of the board of Peoples Gas Light & Coke Company, Chicago, at the annual meeting, contained a foreword which informed stockholders that "if you have a comment or question to offer after reading these remarks, Mr. Oates would appreciate hearing from you."

Mr. Oates says that each year since the company started issuing a report of this nature in 1948 comments and questions have been invited from stockholders, but the company has received very few letters. Those which have come in generally have been complimentary in tone.

"Only one constructive suggestion, pertaining to the inclusion of pictures in the report, has been received," he adds.

"Because very few stockholders are able or choose to attend the annual meeting in person, I consider the postmeeting report as a valuable medium, in addition to annual and quarterly reports, of keeping our stockholders informed concerning our company and thereby improving our relations with them."

LEWIS D. GILBERT, who attends many annual meetings with questions as to management practices and with suggestions for changes, is a strong advocate of postmeeting company reports. Mr. Gilbert issues a report himself on his activities at annual meetings.

In discussing what he described as "inadequate" postmeeting reports in his account of his activities at 1954 meetings, Mr. Gilbert said:

> These fail to include questions and answers, fail to give the gist of the discussion period, and fail to give the actual vote on proposals coming before the meeting. It either is not given at all, or the owners are furnished useless percentage figures, very possibly because the managements prefer not to tell the owners that in terms of shares the opposition vote ran into the thousands.

Mr. Gilbert also feels that postmeeting reports should identify by name the stockholders asking questions at the meeting. Photographs are another requisite he sets.

In the utility category, Mr. Gilbert liked the report of Seattle Gas, observing that N. Henry Gellert, president, "took the utility field another step toward the lead in public relations in that field, with the sending out of the best postmeeting report the company has yet issued."

He described the 1954 Electric Bond and Share report as "the first real postmeeting report sent out by the company." He said it was the first such report he had seen which included charts.

"The report in other respects in every way meets the qualifications independent shareholders insist on when it comes to editing and sending out postmeeting reports," he added.

IN the case of one corporation where the question of a postmeeting report was raised, Mr. Gilbert observed:

> We certainly were not impressed with the management arguments against the postmeeting report to the effect that giving questions and answers of general interest would cost more than it would be worth to owners.

We would suggest that management let the individual owners be the judge of that, he said.

Moving Platforms in New York Subway Transit

Seven years ago this author first broached the idea of a continuously moving belt for carrying transit passengers between shuttle terminals, to engineers of rubber and belt manufacturing companies. But it took three years to develop a plan on paper that seemed workable and safe. Now New York city is going ahead with this far-visioned plan of moving passengers by conveyor belts.

By S. H. BINGHAM*

Very few people—including resident New Yorkers—have any real concept of the tremendous scope of our New York city transit system. It is owned by the city and operated by the New York City Transit Authority under the provisions of the Transit Authority Act of 1953 and a lease agreement with the city. It includes all the rapid transit lines in the city, all the surface lines in Brooklyn and Staten Island, about half the surface lines in Queens, and five bus lines in Manhattan. The rapid transit lines alone carried over one and one-half billion passengers last year—three times as many passengers as all the class I railroads in the United States. The length of rapid transit track is 727 miles—longer than the air-line distance from New York to Chicago. During the same period our surface lines carried over one-half billion passengers.

We operate 6,734 passenger cars on the rapid transit lines. Passenger cars on all the class I railroads in the United States total only three times this number. On our surface lines we operate 2,141 buses and 300 trolley cars and trolley coaches.

The vehicles and the rapid transit structures are what the passenger sees. Behind these operations there are three major rapid transit car repair shops, 13 rapid transit car inspection barns, one of the largest bus repair shops in the world, and 12 bus garages. These shops are equipped

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to strip a vehicle down to its bare frame, repair or renew any worn or damaged parts, rebuild it, and restore it to service in as good operating condition as new.

This transit system also includes three power plants generating 1.3 billion kilowatt-hours of electrical energy per year to operate BMT and IRT trains. Last year, 630,000,000 kilowatt-hours were purchased from the Consolidated Edison Company for the IND division. To distribute this energy to the substations and convert it to the 600-volt DC current required for train operation, the system operates a distribution network of 910 miles of high-tension feeders and 150 rotary and rectifier substations.

THE original cost of this system to the people of the city of New York was approximately one and three-quarter billion dollars. The estimated cost of reproducing it new today is over four billion dollars. These are tremendous figures, but we are running a tremendous business. It requires a total of 44,000 employees to operate and maintain the entire system.

Like any living organization the transit system has its continuing requirements for expansion, renewal, and improvement. In our case these needs have not been fully met in the past and large parts of our structure and equipment are now fifty years old and still in daily use. It is only in recent years that adequate capital funds have been made available to us for improvement and modernization, and inevitably in a system of this size and complexity, it will be years before the results are fully obvious.

Major interest has been focused of late on the proposed conveyor system designed to completely replace the shuttle between Times Square and Grand Central station. You must keep in mind that the shuttle was not designed originally for its present use.

The original subway, which went into operation in 1904, ran north from City Hall up the East Side to Park avenue and 42nd street. It continued west under 42nd street to Broadway, and then turned north up Broadway.

It was inadequate to serve the needs of the city from its inception and new lines were soon constructed. One of these was an extension of the original line, running north from 42nd street under Lexington avenue, and is now the East Side line of our IRT division. Another line was an extension south from 42nd street under Seventh avenue, and is now the West Side line of our IRT division. This has been referred to as "completing the H." The shuttle became the "cross bar of the H" connecting the East Side and West Side IRT lines, with access to the Broadway line of the BMT division at Times Square.

SHUTTLE operation between Grand Central and Times Square, in essentially its present form, began in 1918. As might be expected of any operation nearly forty years old, it is expensive to operate, inconvenient for passengers, and has long been in need of modernization. In studying this problem I sought a more efficient system of handling the traffic on this very important link of our system.

The shuttle is one of the more heavily used sections of the transit system, carrying over 60,000 people per day in each direction. We now operate 10 cars on three of the four existing tracks between Times Square and Grand Central. The four

tracks vary somewhat in length, the average being 2,580 feet.

It is a closed operation permitting the application of an entirely new mode of transportation to the shuttle without affecting any other part of the system. It was my desire to devise a way to carry the passengers within the space occupied by the two center tracks of the 4-track route, leaving the outer tracks available for use as walkways and air-raid shelters.

A conveyor system seemed to offer a possible solution. Its continuous operation offered high capacity in a small space, and the small operating man-power requirements would result in low operating cost.

In the past many passenger conveyor ideas had been suggested and some moving sidewalks and similar schemes actually operated, usually at expositions.

Nothing proposed, or in existence, offered any practical solution for the shuttle.

TODAY we have completely designed, and actually constructed on a small scale, but large enough to carry passengers, a passenger conveyor which I have developed together with the engineers of the Goodyear Tire & Rubber Company and the Stephens-Adamson Manufacturing Company, who have solved many industrial conveyor problems. The contract for the construction and installation of the conveyor equipment has been approved by the Transit Authority and is pending before the Board of Estimate.

The major problems were to develop a passenger conveyor that could accommodate more than 12,000 passengers per hour in each direction with at least present subway standards of safety, would give a speedy, comfortable, and convenient ride, would cost less to operate than the present shuttle, and would not cost more than the conventional rehabilitation previously studied for the shuttle. Furthermore, it should be designed to fit about half the space occupied by the existing shuttle.

The new passenger carveyor under consideration satisfies all of these conditions. It will carry 16,000 passengers per hour in each direction more safely, and more comfortably, than the present operation. Passengers will make the trip in two minutes, with no waiting for trains. The present shuttle trip is two minutes of running time, plus the waiting time between trains. We estimate that operating and maintenance costs for continuous operation will be about 50 per cent of present shuttle costs.

The cost of the conveyor system, including the necessary structural changes in the tunnel, will be slightly over $5,000,-

¶ *"LIKE any living organization the transit system has its continuing requirements for expansion, renewal, and improvement. In our case these needs have not been fully met in the past and large parts of our structure and equipment are now fifty years old and still in daily use. It is only in recent years that adequate capital funds have been made available to us for improvement and modernization, and inevitably in a system of this size and complexity, it will be years before the results are fully obvious."*

000, which is less than the cost of modernizing the shuttle with conventional subway equipment. The proposed conveyor will occupy only the two center tracks of the shuttle. The remaining two trackways can be converted to well-lighted air-raid shelters and walkways. Adjoining basements become potential shops that can increase business and tax revenue to the city.

THE proposed system differs from previous passenger conveyor proposals in that the passengers will ride in cars carried on belts and on banks of rubber-tired wheels.

Conveyor belts are used at low speed for passengers and cars at loading and unloading areas and at high speed to transport the cars from station to station. Banks of wheels, equipped with rubber tires, moving at different speeds, accelerate and decelerate the cars between stations, and carry the cars around all turns.

Passengers at the stations will walk upon the loading belts which move at a speed of about one and one-half miles an hour. The 7-foot square, 10-seat passenger cars ride on a belt parallel to and moving at the same rate of speed as the passenger loading belt. Nineteen cars pass the loading area every minute.

Passengers step from the loading belt into a car which is empty as it arrives at the loading area and is moving at the same speed as the loading belt. Doors open automatically when the cars reach the loading area and slowly close prior to the time the cars clear the loading area. The passenger loading belt is nine feet wide and sixty feet long. The car-carrying belt is the same length, but only five feet wide. The cars overhang the belt both front and back, and fit snugly against the passenger loading belt. The cars are closely spaced, bumper to bumper, as they pass the loading area.

Once clear of the loading area, the passenger cars are rolled for about 75 feet over a bank of rubber-tired accelerator wheels which quickly step up their speed to 15 miles an hour. The acceleration is at the comfortable rate of two and three-quarter miles per hour per second. Spacing between the cars is increased as they are accelerated and they then ride onto the main line conveyor belt, running at 15 miles an hour. This endless high-speed belt transports the cars on the main run between stations.

At the other station, the passenger cars are slowed down at the same rate in a 75-foot run over a bank of decelerator wheels and are delivered bumper to bumper on a car-carrying belt moving at approximately one and one-half miles an hour. The car doors open and passengers step out onto a passenger unloading belt moving at one and one-half miles an hour, the same speed as the cars, and walk or ride to the exit at the end of the belt. The unloading belts are the same dimensions as the loading belts.

The empty car is then carried around a loop at the end of the shuttle system on a bank of wheels and deposited on the low-speed belt in the loading area ready to carry passengers. The continuous flow of cars eliminates waiting and platform congestion.

WE have designed the system with all master controls concentrated in one room. The operator in this control room will be able to observe all four loading and unloading areas by means of an industrial television system and to start and stop the

Belt *versus* "Batch" Transport

"IN industry it has been found that lower costs and greater efficiency can be achieved through the substitution of continuous processes for the older batch operations. We must do the same in mass transportation wherever the volume justifies it. The conveyor system . . . does precisely this. It is the first radical advance in mass transportation of people in many years, and I am firmly convinced that we will soon see it widely applied."

system. To my knowledge this is the first application of a closed television system to rapid transit operation. The operator will also have control equipment to give him continuous information about the functioning of all essential parts of the entire system.

I FIRST broached this idea to these companies in 1948. It took until 1951 to develop a plan on paper that seemed workable and overcame the hurdles of safe passenger loading and unloading on moving belts, and on means for accelerating and decelerating the cars.

In April of 1953 a working model that proved the feasibility of the design was shown in New York city.

During the many months of exhaustive engineering to perfect the conveyor belt subway, full-scale testing equipment to solve human element problems was built.

A rubber conveyor belt sixty feet long and nine feet wide and a mock-up of five full-size cars were set up for human engineering. The cars operated adjacent to the belt, duplicating actual loading and unloading conditions on the New York city subway belt system.

An accelerating and decelerating system was built to determine the maximum rate at which a passenger car could be speeded up and slowed down on a conveyor belt system.

A model system, to a smaller scale, with one-passenger cars, reproducing all the essential operating conditions of the shuttle system, was constructed and is now in operation in one of the company's plants.

These test installations proved the work-

ability of the subway belt system. Hundreds of tests were made with all kinds of people, old and young, nimble and lame, carrying packages and leading children, and it has been determined that a belt conveyor is the most efficient and least costly means of moving large numbers of people over short distances.

THERE is no reason why such a conveyor subway system cannot be extended to longer systems with way stations. All that is required for a way station is a bank of decelerating rollers, low-speed unloading and loading belts, and accelerating rollers.

No other plan or system of moving belts for passenger transportation has ever been presented which compares with the merits of this design to meet the exacting requirements for safety, economy, and efficiency demanded in rapid transit application.

It is extremely flexible, and installations can be made to fit almost any situation. In addition to all these advantages, it operates with a minimum of dust, noise, and vibration. The conveyor, it seems to me, is the prototype of the greatest advance in mass transportation we have seen in many years. It adapts for passenger transport the high-capacity, low-cost methods of conveyor transportation so successfully developed for manufacturing, mining, and construction.

While the existing plans are designed for a specific installation, we are studying extensions of this system which can be applied to transit operations of any length with way stations along the route to be served. It is expected that savings comparable to those estimated for the shuttle will be realized in a more extensive system.

A conveyor system 7,200 feet long with two belts moving in opposite directions and six stations, is under study for a central loop subway in downtown Cincinnati to serve 80 square blocks. It is an excellent means of providing for passenger movement and distribution in a congested downtown area. The cities of Sao Paulo in Brazil, San Francisco, Boston, and others have shown an active interest in the system.

SIMILAR and simpler passenger conveyor systems are being developed for large parking fields, airports, railroad terminals, stadiums, and other locations where great numbers of people have to be moved quickly and at low cost.

As is well known, mass transportation systems are having a difficult time, chiefly as a result of competition from private cars. Increasing use of private automobiles has taken away passengers, and the resulting traffic congestion has slowed down surface traffic to a crawl. Operating expenses have increased, with labor costs taking a greater share of the declining revenues.

Basically there are only two things that must be done to reverse this trend. One, which is to a large extent beyond the control of the transit operator, is to speed traffic in the streets. There are signs that our city planners and officials are beginning to realize that something must be done to control and channel the flood of private cars. Many are coming to the realization that the encouragement of mass transit offers the best hope for the city to accomplish this at the lowest cost.

The other, is for the transit operator to improve his service and efficiency through application of the best modern technology. The conveyor for human

transportation is to my mind one of the brightest hopes for progress in this direction.

In industry it has been found that lower costs and greater efficiency can be achieved through the substitution of continuous processes for the older batch operations. We must do the same in mass transportation wherever the volume justifies it. The conveyor system I have described, with appropriate modifications to meet local requirements, does precisely this. It is the first radical advance in mass transportation of people in many years, and I am firmly convinced that we will soon see it widely applied.

More Business for "Moving Sidewalks"

OBSERVERS *of the transit scene are predicting that the conveyor-belt subway, or car conveyor, and moving sidewalk, will become familiar sights in the next decade. The industrial conveyor belt is already well established, but the passenger conveyor is just coming into its own. It will act to revitalize urban centers by providing low-cost transit and reducing congestion.*

Only one exists today—a short, moving sidewalk called the speedwalk, which transports pedestrians from the H&M tubes at Journal Square, Jersey City, to the Erie tracks for suburban distribution. A contract was recently awarded by the New York Transit Authority to Passenger Belt Conveyors, Inc., of Akron, Ohio, for replacement of the 42nd street shuttle across the girth of midtown Manhattan.

Other cities are interested, but may be cautiously awaiting the outcome of New York's experiment. Among these are: Cleveland, Cincinnati, Kansas City, Los Angeles, San Francisco, Houston, Washington, D. C., St. Louis, and Montreal. Among the European cities are London, Stockholm, Paris, and Oslo.

The interest in passenger conveyor belts through the world reflects the widespread metropolitan need for low-cost installation and operation of a "transit" system for relief of traffic congestion. Unless cities can solve their traffic and transit problems efficiently and economically, it will become increasingly expensive to do business in them, and the forces for decentralization will become overwhelming. We must be willing to break decidedly with the past if we are to improve upon our present methods of transit. The new passenger conveyor appears to offer one solution to a pressing municipal problem.

OUT OF THE MAILBAG

Some Facts Regarding the Phillips, Michigan Wisconsin Contract

I DID not until recently have the opportunity to read the article "Wisconsin and the Phillips Case" in your January 20, 1955, issue, by Chairman James R. Durfee of the Wisconsin commission. But I would like to straighten out the record and your readers on certain statements made therein which are not in accord with the facts as I understand them. In August, 1945, I was retained by the late Frank L. Conrad, president of the American Light & Traction Company, to make a study of gas reserves to be dedicated by the Phillips Petroleum Company, for the newly formed Michigan Wisconsin Pipe Line Company.

After investigation, it was my conclusion that the proposed reserves were insufficient for the project. At Mr. Conrad's request, I attended a conference between officials of Phillips and of American Light & Traction. As a result, the Phillips people went back to the Hugoton area to try to get additional reserves. Other requirements were demanded of, and substantially agreed to, by Phillips. It was recognized that these additional requirements, favorable to the pipeline company, would necessitate a higher price. Phillips succeeded in getting commitments from four other producers, thus increasing the committed reserves by approximately 35 per cent. When the proposed contract was prepared, Mr. Conrad sent me a copy requesting that I suggest any changes which would give the pipeline company additional protection. This I did, in a 3-page memorandum sent him on October 13, 1945. In November, 1945, I wrote Mr. Conrad a report, stating that Phillips then owned or controlled an estimated 3,400 billion cubic feet of gas under acreage to be dedicated to his company, and that this reserve was sufficient for the pipeline project.

My recommendations were generally accepted, and the result of these steps was the contract dated December 11, 1945.

At the time, it was thought that the certification and construction of the new pipeline would proceed with dispatch. However, there were numerous delays, and it was not until October, 1949, that Michigan Wisconsin began delivering gas.

THUS, I was familiar with this project and its problems practically from the beginning. In addition, I have been studying the Hugoton gas field for more than twenty-five years. Although it was discovered in 1919, the major development did not come until the 1940's. In 1939, only about 300 wells had been drilled in the field; today the number exceeds 5,500. Nine interstate pipelines are now supplied from this field.

Increased demand for gas, along with greater producing costs, have been reflected in higher field prices for gas. In the years 1945-49 the national economy experienced a period of sharp inflation. The commodity price index rose two-thirds. Steel pipe, one of the principal items of cost in producing and gathering natural gas, increased more than 70 per cent. Phillips and the four producing companies which had contracted to supply Michigan Wisconsin had to hold their gas reserves in readiness, with no income and at great annual cost for delay rentals and interest on the millions of dollars invested in the acreage.

It should be emphasized that the rising price of gas in the producing areas of the nation has been the result of these forces common to our entire economy, and not the arbitrary action of any particular producer or group of producers. It is entirely reasonable, and to be expected, that natural gas would bring a higher price in the field in 1949, or in 1955, than it did in 1945.

Mr. Durfee makes some erroneous implications (pages 71, 72, PUBLIC UTILITIES

FORTNIGHTLY, January 20, 1955) about the price provisions of the Phillips contract. No gas was ever sold under this contract at five cents. And price adjustment, or escalation, was provided for in the original contract dated December 11, 1945; it was not a supplementary provision "added to the original contract by amendments which the pipeline company had to accept because of contract deadline dates and construction difficulties" (page 72). Furthermore, the price was not raised to 8½ cents for "unmerited" reasons. Under the normal operation of the escalation clause, the price would have turned out to be 8½ cents by the time the first gas was sold in 1949.

ESCALATION clauses, being much misunderstood, merit special discussion. The expectancy of price changes has been commonly recognized by producers and pipeliners, as evidenced by some sort of safeguarding price provision in long-term contracts, which can be found in contracts made more than twenty-five years ago. The contracting parties, recognizing their inability to predict values at distant future dates, tie the price to some yardstick considered fair by both parties. In this instance, the yardstick is a commodity price index. The escalation clause provides that an increase should take effect only in the event that Michigan Wisconsin should receive a rate increase (thus protecting the middleman), and that the price to Phillips would then increase, not in proportion to the rise in the commodity index, but only in proportion to Michigan Wisconsin's rate increase.

Apparently Mr. Durfee's premise is that the contract with Michigan Wisconsin made Phillips a monopoly. Actually, before contracts are made between pipeliners and producers, the pipeline company shops around for the most economical supply source available for its proposed markets, and, having succeeded, then the most intensive bargaining takes place before any lines are built. Such was the case here. I know, for I was there for much of the bargaining.

American Light & Traction concluded that Phillips offered the most attractive supply-price situation available to it. In my judgment, that is exactly what it got—for itself and for the people of Wisconsin and Michigan—in a contract which fairly protected the buyers. If Frank Conrad had failed nine years ago to secure a gas supply exceeding three trillion cubic feet in one field, with a single place of delivery, within economical reach of his markets, and at the price stipulated in the Phillips contract, including controlled escalation, no comparable supply at comparable cost could have been negotiated by his company during the years since that time.

IT is becoming increasingly difficult for a pipeline to contract for large quantities of natural gas to be delivered over a period of fifteen or twenty years. In fact, in not very many years hence, and in some markets of the nation, the price problem may very well be overshadowed by the inability of the suppliers to obtain additional gas for their customers. Regulatory bodies responsible for protecting the interests of consumers should give some thought to longevity and adequacy of supply when they are assessing the reasonableness of prices paid to producers.

The position of the Wisconsin Public Service Commission in the recent American-Louisiana Pipe Line Company certificate case illustrates realistic thinking about price in relation to additional supply. The new pipeline based its case on a proposed gas supply for which it would initially pay producers a price of 20 cents per thousand cubic feet, under contracts with price adjustment provisions similar to those in the 1945 Phillips contract.

The Wisconsin commission, inconsistent with its criticism of the Phillips contract, vigorously supported this proposed line. In September of 1954, Mr. Durfee, in his capacity of chairman of the Wisconsin commission, appeared before the Federal Power Commission and stated in part as follows:

> I wish to make it clear that we do now support the motion of the American-Louisiana Pipe Line Company for a conditional certificate . . . the American-Louisiana project would for Wisconsin . . . supply much additional gas to the existing utility customers, substantially double their supply, and would supply . . . communities . . . not now being served with natural gas.

The field cost of gas to American-Louisiana was a result of arm's-length bargaining. It was based on economic factors, paralleling

those of the criticized Phillips contract, that make the higher price of the proposed new gas supply entirely realistic and reasonable. Furthermore, the proposed suppliers of a proposed line are hardly in a position to be arbitrary as to price or other conditions, since the project, even in the absence of producer regulation, must have its plans reviewed and approved by the Federal Power Commission.

MANUFACTURED gas and electricity can be produced at costs which are related largely to the cost of the equipment, materials, and labor used for their production. By inference, such costs give the regulators a rough guide to the value of these commodities. Natural gas, on the other hand, affords no such yardstick for measuring its value. Rather, the value of gas depends upon such things as its quality, quantity, the longevity of supply, and, principally, its accessibility to markets. In other words, the adequacy of supply and reasonableness of price of natural gas in the field do not hinge on the same sort of physical facts which govern supply and price of manufactured gas or electricity, or the transportation and distribution of natural gas.

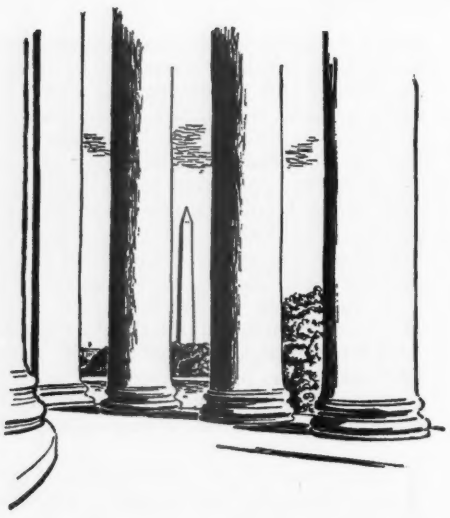
The competitive business of searching for natural gas, of drilling and producing gas, and the public utility business of natural gas transmission and distribution, must compete with other economic activities in order to get funds for growth. This competition for expansion funds requires that the producing end of the business continue to operate in an atmosphere which is favorable to further exploration and wildcatting. If people are going to spend risk dollars in any phase of any business, including the gas business, they must be able reasonably to expect that the return will be appropriate to the risks taken. With federal public utility regulation imposed on gas producers, the risk dollars will not, in my opinion, be forthcoming in adequate amounts for exploration and production. Regulation of producers will inject many uncertainties of arbitrary determinations into this highly competitive, risk-taking business, and in my judgment will work directly against the consumers' interest of adequate supply at the lowest reasonable price.

I SUBMIT these facts to the readers of PUBLIC UTILITIES FORTNIGHTLY, not as an advocate for Phillips, nor as an advocate for Michigan Wisconsin Pipe Line Company, but as an advocate for *facts*. The problem of natural gas supply is a national problem, in which all consuming areas have an interest; and their interest is not contrary to, but is in essential agreement with, the interests of the producers. The consuming areas and the producing areas have many problems in common that can only be solved in an atmosphere of mutual understanding. It is my hope to promote this atmosphere.

—RALPH E. DAVIS,
Consultant, petroleum and natural gas, Houston Texas.

"... let no one tell us that we have reached the end of our golden age; for this, in truth, is only the beginning. In my opinion we stand on the doorstep of the greatest era of progress this nation has ever seen. Before us lies the challenging task of taming the atom. We have yet to harness the source of all earthly energy—the rays of the sun; for today, only one-tenth of one per cent of that energy is put to use. In our laboratories we are perfecting amazing automatic devices that will diminish still further the expenditure of human effort, and increase enormously the production and pay of our workers. And our population is growing in numbers with almost explosive rapidity."

—BENJAMIN F. FAIRLESS,
Chairman of the board, United States Steel Corporation.



Washington and the Utilities

The Gas Bill Hearings

PROPONENTS of the Harris-Hinshaw bills to amend the Natural Gas Act so as to exempt producers from FPC jurisdiction had everything their own way in the pre-Easter sessions of the House Interstate and Foreign Commerce Committee hearings. FPC Chairman Kuykendall led off the favorable testimony with a statement of the majority views of the commission (Draper dissenting).

In line with the President's recent Cabinet Committee Report on Energy Supplies and Resources Policy, Kuykendall urged the committee (1) to end federal controls over independent producers, and (2) to allow interstate pipelines, as a legitimate operating expense in their contracts with producers, the reasonable market price of the gas. The commission chairman said this would amount, in practice, to the weighted average field price of the gas, as defined by the commission in its Panhandle Eastern Pipe Line decision of last April.

Brigadier General Ernest O. Thompson, on behalf of the Texas Railroad Commission, followed up Chairman Kuykendall's testimony with a rousing defense of state conservation of natural resources. The regulatory veteran said the search for new sources of natural gas will require free competitive enterprise, restricted only by appropriate state conservation regulation. General Thompson stated that the risks of search to oil and gas producers were such that a "public utility rate of return would not justify their continuing in business" and that enactment of the Harris Bill would best assure the discovery of adequate supplies for an expanding economy.

ON the third day, David T. Searls, Texas attorney, put out a threatening fire for the proponents of the bill when he introduced some amendments which would remove the objections of the pipeline companies. These were generally to the effect that pipeline companies would not be penalized by the exemption of producers from gas regulation if it developed that the contractual escalator clauses produced increases in the cost of gas faster or higher than the FPC might be willing to allow (to the pipeline companies) as an operating expense. It was understood that

Representative Harris (Democrat, Arkansas) was willing to accept the amendment to his bill, and Representative Hinshaw (Republican, California), while reserving some doubts, would probably go along. Thus, the threatened rift in the ranks of the producers and the pipeline companies was averted by rewriting the legislation.

But it was averted by taking out of the legislation, or at least diluting, some of the earlier provisions which had been put in the bill as protecting the consumers. And so, it may be that the pipeline amendments will result to some extent in adding more fuel to the opposition of the so-called "consumer bloc."

"Consumers" at Bat Next

CONSUMER spokesmen and coal industry groups are not likely to be heard by the House committee until after the Easter recess (April 1st to 13th). Proponents of the producer exemption bills picked up a psychologically valuable recruit in the Senate in the form of a bill sponsor from a strictly consumer state. Senator Beall (Republican, Maryland) introduced a bill (S 1498) to exempt producers from commission jurisdiction "over any sale of natural gas at or prior to the point of delivery" into interstate commerce. The bill would also allow interstate pipelines the reasonable market price of the gas as a legitimate operating expense. Beall's bill is relatively simple and avoids some of the complicating language of the Harris-Hinshaw bills in the House. It could well provide the bipartisan legislative vehicle upon which the drive for enactment will be made in the Senate.

It is still unlikely that the administration will lend openly expressed support for the proposals of the FPC or the similar recommendations of the Cabinet Committee on Energy Supplies and Resources Policy, as regards such legislation. President Eisenhower late in March gave some encouragement to a consumer group from Wisconsin, led by Senator Wiley (Republican, Wisconsin). He told them he has an open mind on such legislation and will study the situation in the light of consumer interests. This middle-of-the-road approach would imply only that the administration is anxious to minimize the political liabilities inherent in a controversy that cuts deeply across party lines and will not take a definite stand until the over-all temper of Congress is revealed.

THE outlook for such legislation is improving somewhat, as far as House passage is concerned. A favorable report is expected from the House Interstate and Foreign Commerce Committee, headed by Representative Priest (Democrat, Tennessee), as well as clearance by the House Rules Committee, headed by Representative Smith (Democrat, Virginia). This would provide the setup needed by Speaker Rayburn to swing his influence for a decisive vote on the floor of the House. The real difficulty for the bill looms in the Senate, where so-called consumer bloc Senators and a less sympathetic Interstate Commerce Committee could delay action until too late in the session, even if they could not beat the bill on a floor vote.

The depressed state of the national coal industry may also complicate progress of natural gas legislation this year. Opposition to the Harris-Hinshaw bills, unless coal industry amendments are included, has been expressed by a group of coal state Congressmen, led by Representative Staggers (Democrat, West Virginia). A bill by Staggers (HR 4943), a committee member, and identical bills from six other coal state Congressmen, seek to carry out the policy of the Cabinet Committee report by requiring FPC to regulate gas sales for industrial use, now exempt from commission control.

XUM

Wire and Wireless Communication

Tax Ruling on Excess Rates

ALL public utilities will be interested in a recent ruling by the Internal Revenue Service. The ruling came after an electric utility requested advice as to federal income tax treatment of possible excess revenues collected under bond pending settlement by court order of the question of a disputed increase in the service rates collected by the company. In this particular case, the excess revenues were held in a restricted bank account.

The question arose in the following manner: In 1951 an electric utility filed a new schedule of electric service rates with the state regulatory commission. The commission immediately suspended the rates and in 1952 issued an order disallowing the schedule of rates filed by the company. By the same order, the commission ordered the company to file new rates higher than those in effect, but less than those disapproved.

The company filed a bill of complaint in court for a stay of the commission's order, and after a bond was filed with the court, a stay was granted and the company given permission to put into effect its rate schedule filed in 1951. Such a schedule was to become effective conditioned upon refund by the company to its customers of any amounts collected in excess of the amounts collectible under the schedules ordered by the commission, in the event that such schedules should later be determined valid.

The company proceeded to collect from its customers thereafter in 1952 and in 1953 at the rate permitted by the court. The surety company which executed the bond in the company's behalf required the company to deposit in a special bank account amounts equaling the collections from customers in excess of the sums collectible according to the rates ordered by the regulatory commission. As of the end of the company's 1953 taxable year, the special account included all of the excess revenues collected under bond during 1952 and 1953, less the amount of income tax paid on such excess revenue for the year 1952.

IN his opinion, the commissioner of Internal Revenue cited several cases holding that earnings under a claim of right and without restriction as to their disposition, even though it may be claimed that the recipient is not entitled to retain them, and even though the recipient may still be adjudged liable to restore their equivalent, are taxable income in the year in which received. He noted also decisions holding that the filing of a bond as security for liability to return excess revenues places

no restriction on the use of the moneys collected. The fact that a corporation indicated in its account books an intention not to exercise its power of absolute dominion over funds received by it in satisfaction of judgment but subject to be returned to the judgment debtor, did not change the status thereof as taxable income of the corporation in the year in which received. Moreover, the setting up of a separate bank account to receive amounts equaling the excess revenues collected by agreement with the bonding company, did not differ in legal effect from the deposition of any other assets of the company as collateral to secure the bond, nor interfere with the company's exercise of the power of absolute dominion over the full amounts collected from the customers.

"In view of the foregoing," the opinion concluded, "it is held that possible excess revenues collected by the electric company during the years 1952 and 1953 pending settlement by court order of the question of a disputed increase in service rates, are includible for federal income tax purposes in gross income for the taxable years in which such excess revenues were received, even though amounts equivalent to the excess were deposited in a special bank account subject to the joint control of the company and the bonding company under the circumstances above stated."

FCC Seeks Funds for TV Study

THE FCC has requested Congress to authorize the commission to conduct a sweeping study of the entire broadcasting and telecasting industry. The proposal was made in a preliminary report of the FCC to the Senate Interstate Commerce Committee. The report said that a "general study by the commission" into the economic structure and the operations of the TV industry is "essential" and would provide "a factual basis" for possible action by the commission, Congress, or the Department of Justice. "The commission has long believed that an over-all study of the broadcast industry—including a review of the network rules—should be made," the report stated. It added that neither the Budget Bureau nor Congress has, to date, been willing to provide funds.

Senator Magnuson, chairman of the Senate Interstate Commerce Committee, promised that his committee will consider the FCC request in open hearings at which FCC members, manufacturers, and others will testify. He criticized the commission report, however, for failing to propose "immediate remedial action" for some of television's ills. Chairman McConnaughey of the FCC informed Magnuson that the purpose of the FCC's study into its television policies is to promote more widespread station use.

The FCC agrees that both the very high-frequency (VHF) channels, now widely used, and the ultrahigh-frequency (UHF) channels, which are having difficulty attracting station users, should be developed in better balance. An Interstate Commerce subcommittee has already held a series of hearings on the problems of TV stations in the UHF band. Because of power and transmission difficulties, many UHF stations have had trouble competing with VHF stations and a number of UHF operators have gone out of business.

IN its report, the FCC said the lack of sets that can receive both UHF and VHF signals, coupled with delay in developing high-powered UHF transmitters, may well be the most important factor in the UHF troubles. Of some 35,000,000 TV sets, only 5,000,000 can receive UHF signals, and only 20 per cent of the new sets being manufactured can receive both.

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Financial News and Comment

By OWEN ELY

The "Squeeze" on Natural Gas Pipeline Earnings

THE accompanying chart (page 445) shows the 1951-54 earnings trends for 35 natural gas pipeline companies, and a breakdown of the income dollar. In three years customers have increased 30 per cent, sales in cubic feet 38 per cent, and revenues 78 per cent. Net income failed to keep pace with revenues, gaining only 33 per cent; thus the carry down of gross to net declined from 13.7 per cent in 1951 to 10.3 per cent in 1954. On the other hand, the percentage of net to gross for the electric power and light industry increased from 13.4 per cent in 1951 to 17.4 per cent in 1954.

The major difficulty with pipeline earnings has been the increased cost of gas, which rose from $375,000,000 in 1951 to $781,000,000 in 1954, a jump of 109 per cent. This compared with the gain of only 78 per cent in revenues. Further readjustments in rates seem necessary to restore a proper balance of earning power.

Currently the Federal Power Commission is preoccupied with the problem of regulation of the field price of gas, and doubtless the issue raised by the Phillips decision of the Supreme Court is also a factor in state regulation. Producers hope that this incubus on their industry will soon be relieved by new legislation. Following the report of the President's Cabinet committee on fuel policy, the Federal Power Commission itself has indicated that it favors a new law to restore the former status quo. (See page 440.)

THE arguments of the producers for new legislation are well known, but an article by William H. Gardner in the magazine *Texas Parade* for March contains some interesting figures. Texas, he reports, controls more than half the nation's 210 trillion cubic feet of gas reserves, and furnishes 23 per cent of all the fuel used for energy in the U. S. The state hopes to win the present fight just as it won the battle of the tidelands against "bureaucratic and socialistic" interests in Washington.

Mr. Gardner points out that the 37 largest companies produce less than half the nation's gas, with no single company

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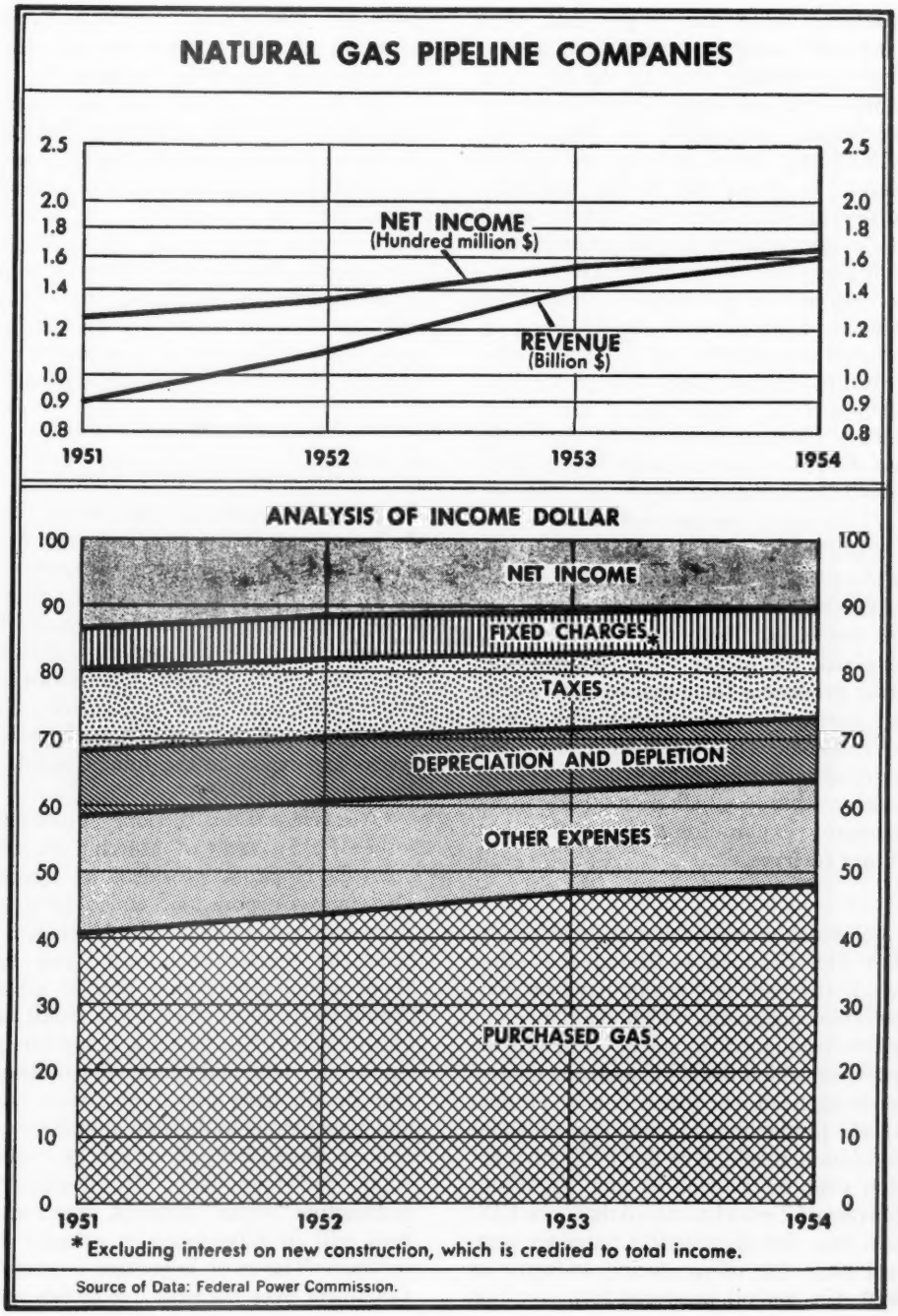

NATURAL GAS PIPELINE COMPANIES
2.5
2.0
1.8
1.6
1.4
1.2
1.0
0.9
0.8
NET INCOME
(Hundred million $)
REVENUE
(Billion $)
1951
1952
1953
1954
ANALYSIS OF INCOME DOLLAR
100
90
80
70
60
50
40
30
20
10
0
NET INCOME
FIXED CHARGES*
TAXES
DEPRECIATION AND DEPLETION
OTHER EXPENSES
PURCHASED GAS
* Excluding interest on new construction, which is credited to total income.
Source of Data: Federal Power Commission.

producing more than 5 per cent. The 4,000-odd small producers do more exploratory drilling than all the big companies combined—which means that they are largely responsible for discovering, maintaining, and increasing our gas reserves. In Texas the 15 big producers furnish less than 48 per cent of the state's production, with the largest producer supplying less than 9 per cent. The production end of the gas industry thus differs radically from the transportation and retail segments, which tend to be monopolistic utilities in their areas (except for competition from other fuels) and hence subject to regulation. In the producing end the law requires competition and the price is governed by supply and demand.

Exploration for new reserves involves a high degree of risk-taking: Only one wildcat exploratory well in nine yields oil or gas; and of *all* wells drilled, 40 per cent are dry holes. Even after production is obtained, the owner must compete with other producers for a market—as well as sharing in the general competition with oil and coal. To attempt to regulate this form of enterprise by applying cost standards or other rate-making methods would hamstring exploration and greatly reduce future reserves.

ANOTHER consideration pointed out by Mr. Gardner, is the adverse effect which the new law might have on conservation programs, which are the recognized function of the states. Much of the gas over which the FPC assumes control is casing-head gas which is a by-product of oil production. Hence the proposed legislation would give the FPC jurisdiction over oil as well as gas. Governor Shivers of Texas has stated that "the FPC now has, for all practical purposes, control over the oil-producing industry as well. Gas and oil, produced from common reservoirs through common wells by the same ownership, cannot be effectively separated for regulatory purposes."

Mr. Gardner pointed out, that of the average price of 86.5 cents per Mcf paid by the residential consumer, only 9.2 cents (or 10.6 per cent) goes to the producer at the well. In other words, the price to the consumer was already about 90 per cent regulated before the Phillips decision. Moreover, during the period 1940-53 retail gas prices increased less than 10 per cent, while the prices of other fuels (and also the cost of living) virtually doubled.

News on Atomic Power

NEW developments are coming thick and fast in the atomic energy field. Possibly disappointed with the tempo of AEC activity, the Joint Congressional Committee on Atomic Energy headed by Senator Anderson has created a citizens' panel of eight to study AEC activities and recommend legislation and policy. The new group will begin hearings in a few weeks and report to the Joint Committee by January 31, 1956.

Of interest also is the long "interview" in the *U. S. News* of March 18th with John J. Hopkins, president of General Dynamics Corporation, which built the *Nautilus*. Mr. Hopkins thinks there has been too much "hush-hush" and fear about atomics, and that greater efforts should be made to educate the public and industrialists on its benefits. Many foreign countries, such as France, Japan, India, and Brazil, have very high power costs and are anxious to develop atomic power, and we should help all we can by lending funds and know-how. He thinks that radioactive "waste" material, now a problem, will in time prove a valuable by-product. The most important atomic development over the next five or ten years

will be the construction of atom-powered ships, he stated.

The Wall Street Journal of March 7th reported that Babcock & Wilcox, with 100-odd experts in the field, can now start building an atom power plant that will produce electricity for less than ten mills per kilowatt-hour as compared with an estimated 11-20 mills for the Duquesne Power plant. While a 10-mill cost is well above the 6-mill cost for many of the big power plants built in the postwar period, nevertheless it is almost competitive in New England where fuel costs are relatively high. Babcock & Wilcox is also heading a group to study the use of liquid uranium; the work is being done at Brookhaven Laboratory and a final report will be made by June 30th.

NUCLEAR DEVELOPMENT ASSOCIATES, a research organization in which the Rockefeller brothers are interested, is planning a big research center in an 1,100-acre former hunting reserve near Pawling, New York. General Walter Bedell Smith, vice chairman of American Machine & Foundry, plans another research center somewhere in New York, which will study applications of atomic energy in such fields as chemistry, medicine, plastics, and the sterilization and pasteurization of foods.

The AEC has announced that the first atom-produced power for commercial use, to be obtained from the land-based copy of the *Sea Wolf's* atomic engine operated by General Electric at West Milton, New York, will become available for sale by late summer or fall.

Consolidated Edison has now released some details of its proposed $55,000,000 nuclear plant at Indian Point on the Hudson river. The picture on page 448 is an artist's concept of the plant. The reactor core will be located deep in solid rock under the materials-handling structure, located on a solid concrete slab between the water-treatment tanks and the oil-fired superheater. In its application the company indicated that it wants to build a pressurized water thorium-uranium converter reactor; the pressurized water concept has been demonstrated in the naval reactor program both as to safety and dependability.

Nonfissionable thorium will be converted into fissionable uranium inside the reactor. Since the expense of handling fuels is an important element in operating costs, the company expects the use of thorium to result in savings. Steam leaving the nuclear boilers will be heated additionally in an oil-fired superheater, increasing the capacity of the plant and reducing production costs.

Capacity of the station is estimated at 236,000 kilowatts, on which basis the cost of the plant works out at about $233 per kilowatt. This is somewhat below earlier estimates around $250-$300 and compares with a cost of about $160 for coal plants.

Trend of Electric Utility Earnings in 1952–54

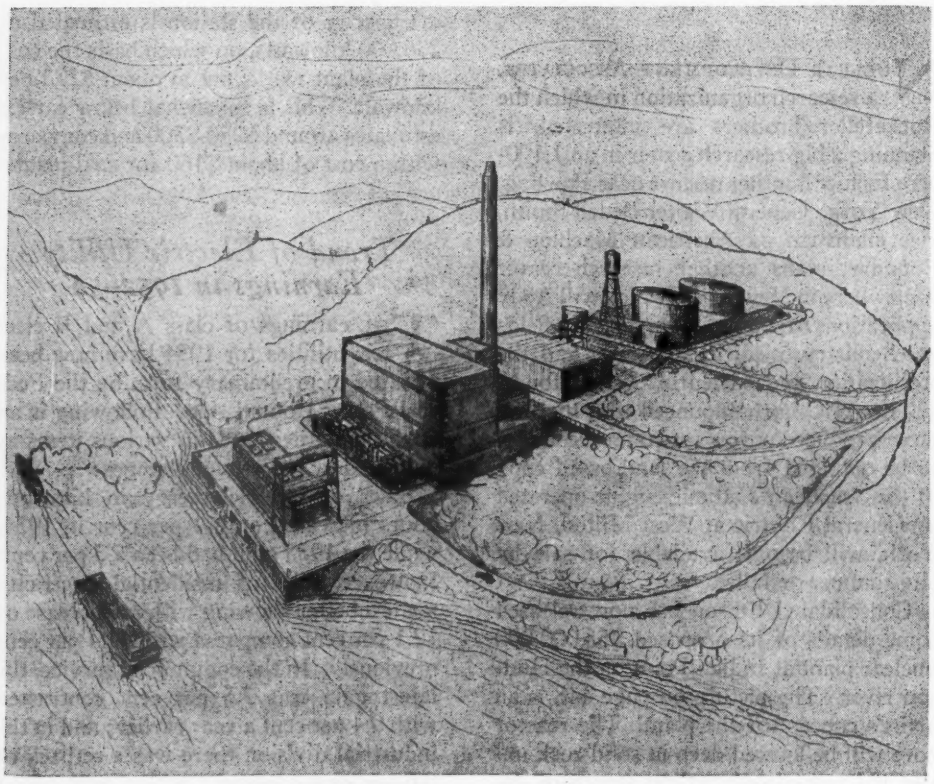
THE earnings of class A and B electric utilities for 1954 have now been released in preliminary form by the Federal Power Commission. Following is an analysis of the trends in various items as indicated by percentage changes:

Sales of electric energy in kilowatt-hours increased only 4 per cent in 1954, while the 1953 gain had been 7.5 per cent. However, sales of residential electricity made a better showing with an increase of 12.1 per cent compared with 11.4 per cent previously. In the commercial service, the latest gain was 7.5 per cent contrasted with 9.4 per cent a year earlier; and in the industrial division there was a setback of 0.6 per cent compared with a gain of 8.1

per cent in 1953. Miscellaneous sales (presumably largely municipal) were apparently not affected by industrial irregularities and the gain of 4.4 per cent was about the same as in the previous year. The gain of 2.5 per cent in sales to other electric utilities was a moderate improvement over the earlier figure.

Turning to revenues, residential gross gained 10.6 per cent, almost the same as in the previous year; and the contrast with the 12.1 per cent increase in kilowatt-hour sales reflected a continued decline in the average residential rate, due to increasing use of appliances with promotional rate schedules. In the commercial bracket, there was evidently little change in rates since the gain of 7.6 per cent was virtually the same as the gain in kilowatt-hour sales. Industrial revenues showed a gain of 0.2 per cent as contrasted with the slight decline in kilowatt-hours, reflecting the stabilizing effect of demand charges. The over-all gain in revenues was 6.1 per cent *versus* 8.6 per cent in the previous year—a smaller change in the percentage gain than for kilowatt-hour sales.

TURNING to operating expenses, the outstanding point of interest was the 2.6 per cent decline in fuel costs as compared with the 10.3 per cent increase in the previous year. Presumably this reflected savings obtained by using large new generating units on a round-the-clock basis, with elimination of less efficient



power units during the period of industrial letdown. The ratio of fuel cost to revenues was only 14.9 per cent in 1954 compared with 16.3 per cent in 1953 and 16.1 per cent in 1952. This showing seems to bear out some arguments previously advanced regarding "built-in stabilizers" in the net earnings of electric utilities.

SALARIES and wages increased 5.3 per cent compared with 6.3 per cent in the previous year; these gains probably reflect approximately the increases granted in wages and fringe costs, with the number of employees showing relatively little change because of introduction of new labor-saving methods and machinery. Other expenses gained 5 per cent, about the same rate of gain as in 1953. However, depreciation and amortization accruals were 12.2 per cent higher in 1954 while the gain in 1953 had been only 9.9 per cent. The dropping out of excess profits taxes was balanced by an increase in miscellaneous federal taxes, but possibly due to the greater use of accelerated amortization, the increase in total taxes was slightly less than in the previous year (7.3 per cent *versus* 8 per cent).

While the smaller gain in revenues was almost balanced by increased fuel savings, the substantial increase in depreciation resulted in a slight setback for the rate of gain in net electric operating revenues—10.6 per cent *versus* 12.1 per cent. However, the utilities last year were fortunate in obtaining better gains in miscellaneous income and in operating income from gas and miscellaneous services—the latter increasing 9.5 per cent compared with only 5.6 per cent in 1953. Presumably this was due to increased rates for gas business, but no detail is shown in the preliminary statement. In any event, gross income reflected these miscellaneous gains by increasing 11.3 per cent, contrasted with a plus of 9.1 per cent a year earlier.

IN the section "income deductions" the utilities did not fare so well. It is true that interest on long-term debt increased only 9.4 per cent compared with 11.4 per cent previously—due to some slowing down in the construction program—but, on the other hand, this slowing down was also reflected in a much smaller credit for interest on construction. Thus, "other income deductions" showed a credit of only $11,300,000 compared with $22,000,000 in the previous year. (In 1952 the figure was a debit of $1,400,000.)

The final result was that net income increased almost the same as previously—10.6 per cent compared with 10.4 per cent. Dividends on preferred stock increased 5.1 per cent and on common stock 10.9 per cent (the corresponding changes in the previous year being 6.7 per cent and 6.2 per cent, respectively). Net electric utility plant increased only 8.9 per cent in 1954, compared with the previous year's jump of 11.3 per cent; the change was due to a smaller construction program and a larger gain in the depreciation reserve.

Hoover Report on REA

THE recommendations of the Hoover Commission on reorganization of the Rural Electrification Administration continue to draw criticism on the commission from REA proponents. The report (reviewed in PUBLIC UTILITIES FORTNIGHTLY, March 31st issue, page 375) recommended outright liquidation of some agencies which have outlived their purposes. In the case of REA and several others, it recommends reorganization into a government lending corporation, similar to the old Reconstruction Finance Corporation.

REA was found to be subsidizing its cooperative borrowers at less than economic cost: (1) by charging interest rates at 2 per cent or 1 per cent less than the Treas-

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ury pays for its own money on a comparable long-term basis; (2) through tax exemptions; (3) through 5-year deferments on 2 per cent interest payments; and (4) through payment by the taxpayers of its administrative expenses.

A number of public power bloc Congressmen fired away at the Hoover Commission for its blunt criticisms of REA subsidy and its recommendations for turning its operations back into private economy. But it remained for the National Rural Electric Co-operative Association to take on the whole Hoover Commission by way of counterattack. In a statement issued by its executive director, Clyde T. Ellis, Congress was urged to abolish the Hoover Commission on Organization of the Executive Branch of the Government. NRECA sent a letter to each member of Congress claiming bias on the Hoover board's part because of its recommendations against REA. On this broad attack there was little enthusiasm in Congress and slight chance of its receiving serious attention.

ON the other hand, the sweeping curtailment of government lending activities recommended by the report has found little enthusiastic support from the Republicans in Congress, and is mostly condemned by the Democrats. Such recommendations would require new legislation and there is little likelihood that Congress will change the present setup of the politically popular REA at this time.

The administration itself has already indicated its opposition to any rise in the interest rates REA charges its borrowers. The significance of the report would seem to lie, for the present, in its value as a document for educating the public on the actual financial status of government lending agencies. It will provide an effective argument to repeated claims that REA is a self-liquidating enterprise, or that REA borrowers pay their own way.

DATA ON ELECTRIC UTILITY STOCKS

1954 Rev. (Mill.)			*3/23/55 Price About*	*Div. Rate*	*Current Yield*	*Share Earnings* — *Cur. Period*	*% Increase*	*12 Mos. Ended*	*Price-Earns. Ratio*	*Dividend Payout*	*Common Stock Equity*
$230	S	Amer. G. & El.	42	$1.80	4.3%	$2.60**	6%	Feb.	16.2	69%	33%
35	O	Ariz. Pub. Serv.	24	.90	3.8	1.42	13	Jan.	16.9	63	33
8	O	Arkansas Mo. Pw.	22	1.12d	5.1	1.82	17	Sept.	12.1	62	30
27	S	Atlantic City El.	39	1.60b	4.1	2.13	21	Jan.	18.3	75	30
5	O	Bangor Hydro-El.	34	1.80	5.3	2.45	19	Dec.	13.9	73	33
4	O	Black Hills P. & L.	26	1.28	4.9	2.10	7	Jan.	12.4	61	23
86	S	Boston Edison	56	2.80	5.0	3.12	5	Dec.	17.9	90	52
17	A	Calif. El. Power	12	.60	5.0	.73	D11	Dec.	16.4	82	34
14	O	Calif. Oregon Pr.	31	1.60	5.2	1.82	32	Nov.	17.0	88	40
7	O	Calif.-Pac. Util.	27	1.40	5.2	2.16**	2	Jan.	12.5	65	29
54	S	Carolina P. & L.	25	1.10	4.4	1.50	11	Feb.	16.7	73	32
23	S	Cent. Hudson G. & E.	16	.76	4.8	.99	21	Dec.	16.2	77	37
15	O	Cent. Ill. E. & G.	34	1.60	4.7	2.10	1	Sept.	16.2	76	31
30	S	Cent. Ill. Light	48	2.20	4.6	3.07	7	Feb.	15.6	72	39
46	S	Cent. Ill. P. S.	25	1.20	4.8	1.93	34	Dec.	13.0	62	33
10	O	Cent. Louisiana El.	27	1.20	4.4	1.53	8	Dec.	17.6	78	31
30	O	Cent. Maine Pw.	25	1.20	4.8	1.96	26	Feb.	12.8	61	30
105	S	Cent. & So. West	33	1.32	4.0	2.00	16	Dec.	16.5	66	35
10	O	Cent. Vt. P. S.	19	.92	4.8	1.31	54	Jan.	14.5	70	30
95	S	Cincinnati G. & E.	27	1.20	4.4	1.71	13	Dec.	15.8	58	37
5	O	Citizens Util.	15	.48a	6.2a	1.05	8	Sept.	14.3	46	38
91	S	Cleveland El. Illum.	71	2.60	3.7	3.86	D4	Dec.	18.4	67	44
3	O	Colo. Cent. Pw.	30	1.20	4.0	1.67	14	Sept.	18.0	72	39
35	S	Columbus & S. O. E.	30	1.60	5.3	1.84	D7	Dec.	16.3	87	36

1954 Rev. (Mill.)		(Continued)	3/23/55 Price About	Div. Rate	Current Yield	Share Earnings Cur. Period	% Increase	12 Mos. Ended	Price-Earns. Ratio	Dividend Payout	Common Stock Equity
310	S	Commonwealth Ed.	40	1.80c	4.5	2.70	14	Dec.	14.8	67	46
10	A	Community Pub. Serv.	24	1.00#	4.2	1.69	5	Dec.	14.2	59	49
1	O	Concord Electric	39	2.40	6.2	2.48	31	Dec.'53	15.7	97	63
60	O	Connecticut L. & P.	20	.92	4.6	1.12	10	Feb.	17.9	82	39
19	O	Connecticut Power	42	2.25	5.4	2.30	D5	Dec.	18.3	98	51
474	S	Consol. Edison	49	2.40	4.9	2.97	NC	Jan.	16.5	81	43
107	S	Consol. Gas of Balt.	33	1.40	4.2	1.89	23	Dec.	17.5	74	37
170	S	Consumers Power	48	2.20	4.6	3.11	7	Jan.	15.4	71	41
61	S	Dayton P. & L.	46	2.00	4.3	2.88	4	Dec.	16.0	69	35
28	S	Delaware P. & L.	35	1.50	4.3	2.07	14	Sept.	16.9	68	37
196	S	Detroit Edison	35	1.60	4.6	2.10	9	Jan.	16.7	76	47
113	A	Duke Power	53	2.00	3.8	3.33	7	Dec.	15.9	60	52
81	S	Duquesne Light	36	1.80	5.0	2.26	2	Dec.	15.9	80	32
27	O	Eastern Util. Assoc.	33	2.00	6.1	2.30	2	Dec.	14.3	87	33
2	O	Edison Sault El.	13	.60	4.6	1.04	35	Nov.	12.5	48	49
10	O	El Paso Elec.	39	1.60	4.1	2.40	23	Jan.	16.3	67	36
10	S	Empire Dist. El.	27	1.40	5.2	1.96	D9	Dec.	13.8	71	33
4	O	Fitchburg G. & E.	55	3.00	5.5	2.80	D7	Dec.'53	19.6	107	53
38	S	Florida Pw. Corp.	43	1.60	3.7	2.22	17	Dec.	19.4	72	30
79	S	Florida P. & L.	63	1.80	2.9	3.50	25	Dec.	18.0	51	33
163	S	General Pub. Util.	35	1.70	4.9	2.42	13	Dec.	14.5	70	38
6	O	Green Mt. Power	32	1.80	5.6	2.19	24	Dec.	14.6	82	36
47	S	Gulf States Util.	34	1.40	4.1	1.90	2	Jan.	17.9	74	30
20	A	Hartford E. L.	57	2.75	4.8	3.54	8	Dec.	16.1	78	46
5	O	Haverhill Elec.	43	2.50†	5.8	2.99	10	Dec.'53	14.4	84	100
58	S	Houston L. & P.	44	1.20	2.7	2.29	20	Jan.	19.2	52	39
7	O	Housatonic P. S.	25	1.40	5.6	1.47	11	Dec.'53	17.0	95	46
23	S	Idaho Power	55	2.20	4.0	3.60	8	Dec.	15.3	61	35
70	S	Illinois Power	51	2.20	4.3	2.91	13	Jan.	17.5	76	35
35	S	Indianapolis P. & L.	25	1.10	4.4	1.59	2	Sept.	15.7	69	36
18	S	Interstate Power	14	.70	5.0	.97	7	Dec.	14.4	72	29
27	O	Iowa Elec. L. & P.	24	1.25	5.2	1.78	9	Jan.	13.5	70	32
31	S	Iowa-Ill. G. & E.	34	1.80	5.3	2.04	D13	Dec.	16.7	88	36
31	S	Iowa Power & Lt.	28	1.40	5.0	1.83	D6	Dec.	15.3	77	30
27	O	Iowa Pub. Service	15	.70	4.7	1.05	7	Jan.	14.3	67	28
12	O	Iowa Southern Util.	22	1.20	5.5	1.55	D4	Jan.	14.2	77	38
51	S	Kansas City P. & L.	41	1.80	4.4	2.30	5	Jan.	17.8	78	35
25	O	Kansas Gas & El.	57	2.40	4.2	4.00	16	Dec.	14.3	60	29
36	S	Kansas Pr. & Lt.	24	1.20	5.0	1.56	18	Dec.	15.4	77	28
35	O	Kentucky Util.	25	1.20	4.8	2.07	20	Dec.	12.1	58	31
6	O	Lake Superior D. P.	43	2.00	4.7	2.85	2	Dec.	15.1	70	36
5	O	Lawrence Elec.	29	1.40†	4.8	1.87	18	Dec.'53	15.5	75	63
77	S	Long Island Ltg.	23	1.00	4.3	1.21	19	Dec.	19.0	83	32
41	S	Louisville G. & E.	47	1.80	3.8	3.35	2	Dec.	14.0	54	34
7	O	Lowell Elec. Lt.	57	3.50†	6.1	3.74	3	Dec.'53	15.2	94	65
8	O	Lynn G. & El.	30	1.60	5.3	2.01	D7	Dec.	14.9	80	73
7	O	Madison G. & E.	41	1.60	3.9	3.13	16	Dec.'53	13.1	51	53
3	A	Maine Public Serv.	29	1.60	5.5	2.03	16	Jan.	14.3	79	35
5	O	Michigan G. & E.	37	1.35a	6.6a	2.72	D1	Sept.	13.6	50	31
144	S	Middle South Util.	33	1.50	4.5	2.13	10	Jan.	15.5	70	36
21	S	Minnesota P. & L.	23	1.20	5.2	1.72	D15	Jan.	13.4	70	31
2	O	Miss. Valley P. S.	27	1.40g	5.2	2.37	11	Feb.	11.4	59	30
10	A	Missouri P. S.	42	1.80	4.3	2.70	14	Dec.	15.6	67	28
5	O	Missouri Util.	24	1.24	5.2	1.98	21	Dec.	12.1	63	32
31	S	Montana Power	37	1.60	4.3	2.58	D1	Jan.	14.3	62	36
122	S	New England Elec.	17	.90	5.3	1.24**	—	Dec.	13.7	73	34
38	O	New England G. & E.	18	1.00	5.6	1.33**	D4	Jan.	13.5	75	36
41	O	New Orleans P. S.	45	2.25	5.0	2.82	10	Nov.	16.0	80	39
2	O	Newport Electric	37	2.00	5.4	2.43	D19	Jan.	15.2	82	34
73	S	N. Y. State El. & Gas	40	2.00	5.0	2.59	1	Jan.	15.4	77	35
210	S	Niagara Mohawk Pw.	32	1.60	5.0	2.11	4	Dec.	15.2	76	35
68	O	Northern Ind. P. S.	34	1.60	4.7	2.45	14	Dec.	13.9	65	33
118	S	Northern States Pr.	17	.80	4.7	1.07	7	Dec.	15.9	75	35
8	O	Northwestern P. S.	16	.90	5.6	1.20	D14	Sept.	13.3	75	27

1954 Rev. Mill.)		(Continued)	3/23/55 Price About	Div. Rate	Current Yield	Share Earnings Cur. Period	Share Earnings % Increase	Share Earnings 12 Mos. Ended	Price-Earns. Ratio	Dividend Payout	Common Stock Equity
110	S	Ohio Edison	46	2.20	4.8	3.10	7	Feb.	14.8	71	41
40	S	Oklahoma G. & E.	34	1.60	4.7	2.28	23	Feb.	14.9	70	30
14	O	Otter Tail Power	30	1.60	5.3	1.97	D2	Jan.	15.2	81	30
386	S	Pacific G. & E.	47	2.20	4.7	2.88	2	Dec.	16.3	76	33
40	O	Pacific P. & L.	25	1.30	5.2	1.54	D7	Dec.	16.2	84	27
109	S	Penn Power & Lt.	44	2.40	5.5	2.86	9	Jan.	15.4	84	29
10	A	Penn. Water & Pw.	46	2.00	4.3	2.73	28	Dec.	16.9	73	34
196	S	Philadelphia Elec.	38	1.80	4.7	2.25	3	Dec.	16.9	80	37
29	O	Portland Gen. Elec.	21	1.00	4.8	1.48	16	Jan.	14.2	68	42
52	S	Potomac Elec. Pw.	20	1.00	5.0	1.17	2	Dec.	17.1	85	39
56	S	Pub. Serv. of Colo.	42	1.60	3.8	2.38	1	Sept.	17.6	67	34
250	S	Pub. Serv. El. & Gas	30	1.60	5.3	2.00**	—	Dec.	15.0	80	31
62	S	Public Serv. of Ind.	40	2.00	5.0	2.40	3	Jan.	16.7	83	34
23	O	Public Serv. of N. H.	18	.90	5.0	1.35	79	Feb.	13.3	67	28
8	O	Public Serv. of N. M.	15	.68	4.5	.88	22	Sept.	17.0	77	31
21	S	Puget Sound P. & L.	35	1.70	4.9	2.07	10	Jan.	16.9	82	59
49	S	Rochester G. & E.	46	2.24	4.9	3.20	D3	Dec.	14.4	70	33
14	O	Rockland L. & P.	18	.60	3.3	.83	36	Dec.	21.7	72	35
7	S	St. Joseph L. & P.	24	1.32	5.5	1.76	1	Dec.	13.6	75	43
39	S	San Diego G. & E.	18	.80	4.4	1.05	12	Jan.	17.1	76	47
8	O	Sierra Pacific Pr.	37	2.00	5.4	2.44	D8	Dec.	15.2	82	31
154	S	So. Calif. Edison	48	2.40	5.0	3.05	31	Dec.	15.7	79	35
34	S	So. Carolina E. & G.	19	.90	4.7	1.33	28	Dec.	14.3	68	28
5	O	Southern Colo. Pr.	16	.70	4.4	1.25	8	Nov.	12.8	56	41
194	S	Southern Company	21	.90	4.3	1.27	2	Jan.	16.5	71	31
14	S	So. Indiana G. & E.	31	1.50	4.8	2.26	19	Jan.	13.7	66	40
4	O	So. Nevada Power	18	.80	4.4	1.48	45	Dec.	12.2	54	64
1	O	Southern Utah Pw.	14	1.00	7.1	.87	D14	Jan.	16.1	115	39
3	O	Southwestern E. S.	21	1.00	4.8	1.61	6	Feb.	13.0	62	31
33	S	Southwestern P. S.	28	1.32	4.7	1.55	10	Jan.	18.1	85	30
20	A	Tampa Elec.	27	.93	3.4	1.39	11	Jan.	19.4	67	36
117	S	Texas Utilities	71	2.32	3.3	3.84	19	Jan.	18.5	60	37
35	S	Toledo Edison	15	.70	4.7	1.02	10	Dec.	14.7	69	32
11	O	Tucson G. E. L. & P.	25	1.04	4.2	1.64	17	Dec.	15.2	63	40
103	S	Union Elec. of Mo.	29	1.40	4.8	1.60	26	Sept.	18.1	88	34
28	O	United Illuminating	52	2.50†	4.8	3.13	8	Dec.	16.6	80	57
2	O	Upper Peninsula Pr.	27	1.40	5.2	2.65	145	Nov.	10.2	53	31
32	S	Utah Power & Lt.	45	2.00	4.4	2.91	24	Jan.	15.5	69	41
96	S	Virginia E. & P.	36	1.40	3.9	2.24	37	Jan.	16.1	63	35
23	S	Washington Water Pr.	38	1.70	4.5	1.93	7	Feb.	19.7	88	33
115	S	West Penn Elec.	25	1.20	4.8	1.85	9	Nov.	13.5	65	27
64	O	West Penn Power	47	2.40	5.1	2.97	15	Dec.	15.8	81	33
10	O	Western Lt. & Tel.	29	1.60	5.5	2.42	D6	Dec.	12.0	66	26
22	O	Western Mass. Cos.	41	2.20	5.4	2.94	17	Nov.	13.9	68	52
88	S	Wisconsin Elec. Pr.	32	1.50	4.7	2.09	16	Dec.	15.3	72	42
32	O	Wisconsin P. & L.	27	1.28	4.7	1.68	1	Sept.	16.1	76	34
31	S	Wisconsin Pub. Ser.	23	1.10	4.8	1.52	11	Dec.	15.1	72	34
		Averages			4.8%				15.5	73%	
		Foreign Companies									
$219	S	American & For. Pr.	14	$ .75(e)	5.4%	$2.40	2%	Sept.	5.8	31%	50%
116	A	Brazilian Trac. L. & P.	9	1.00(f)	11.1	1.40	D53	Dec.'53	6.4	71	67
56	A	British Columbia Pr.	26	1.00	3.8	1.47	15	Dec.'53	17.7	68	—
15	A	Gatineau Power	29	1.20	4.1	1.77	10	Dec.'53	16.4	68	29
10	A	Quebec Power	28	1.20	4.3	1.56	20	Dec.	17.9	77	44
45	A	Shawinigan Water & Pr.	53	1.45	2.7	2.84	25	Dec.	18.7	51	35

B—Boston Exchange. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *If additional common shares have been recently offered, earnings are adjusted to give effect to the offering. Percentage change is in the net income available for common stock. **Based on average number of shares. a—Also regular annual 3 per cent stock dividend, which is included in the yield. b—Also 5 per cent stock dividend. c—Also 3/10 share of Northern Illinois Gas for each share of Commonwealth Edison. #—Also occasional stock dividends. †—Estimated. d—Also 8 per cent stock dividend. e—Includes 15 cents extra. f—Approximate equivalent in cash and stock. g—Also 10 per cent stock dividend.

What Others Think

The Vanishing Yardstick

THE catch phrase "TVA yardstick" has echoed familiarly through the halls of Congress since the very first debates on the bill to establish the authority. It was originally used to rationalize and justify the fact that, under the terms of the bill, government itself would be embarking on an out-and-out business venture in electric power and fertilizer. The "incidental" federal government functions of TVA generation and distribution of electric power, which at that time seemed strange to the conventional ideas of American free enterprise tradition, were justified under the argument that government was entering into business competition with its private citizens only to set an example as to how cheaply and efficiently electricity could be produced. In an address to the House of Representatives, delivered March 23rd, Representative Dondero (Republican, Michigan) has traced the development and use of the "yardstick" concept in the years since the final adoption of the Tennessee Valley Authority Act. He said:

> As the years went by and the TVA officials began their annual pilgrimages to Washington seeking appropriations to expand their power empire, the "yardstick" argument came more and more in evidence to support their requests. We were told that private enterprise, though it was in business to make a profit—necessarily a publicly regulated and limited profit in the field of electric power production—and obliged to pay taxes both federal and local, nevertheless must be subject to so-called "yardstick" competition. . . . year after year the Congress poured federal treasury money into the Tennessee valley to the extent that now the power investment alone totals $1,109,220,992. . . .
>
> Once having exhausted the water-power potential of the Tennessee river valley, national defense arguments and the need to "firm up" uncertain water power served as new plausible reasons to justify TVA's entrance into the simon-pure business operation of building and operating steam-generating electric power plants.
>
> Thus slowly and steadily the percentage of steam capacity in the TVA's so-called hydroelectric system has grown through the years.
>
> In 1938 it was but 14.5 per cent of the total installed capacity. In 1941 it edged up to 21.3 per cent. In 1952 steam power was up to 28.2 per cent. By 1953 it was 42.6 per cent, in 1954, 49.9 per cent; and at the end of fiscal 1955 it will be 66.5 per cent. And we are also offi-

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> cially informed that when all presently authorized generating capacity is completed the great Tennessee river valley hydroelectric system will have 75 per cent steam capacity and 25 per cent hydro capacity.

IT is the people of every state in the Union who have been financing the TVA steam power giant, the Congressman added, though there could be no little justification for such scale of development purely for purposes of area flood control, navigation, and the like. This had all been done. He concludes that from now on any *further* expansion of TVA can have no more "governmental function" disguise. It must come openly and honestly under the category of financing a standard steam electric business operation, with the American people picking up the tab—and getting virtually no return on their investment.

Representative Dondero continued:

> Proponents of the TVA have long answered the charge that TVA pays no interest and no taxes with the argument that the federal treasury was being reimbursed for its investment and that TVA was indeed paying amounts to local governments "in lieu" of taxes. . . . the record . . . will show that the TVA has at no time repaid more than 1.4 per cent of its total investment in any one year.
>
> In 1949, on $291,198,000 of interest-free appropriated funds TVA paid the U. S. Treasury from power revenues $3,000,000 or 1 per cent. In 1950, $2,500,000 was paid on $320,638,000. That's 0.8 per cent. In 1951, $4,000,000 was paid on $423,280,000. That's 0.9 per cent. In 1952, $7,000,000 was paid on $616,123,000. That's 1.1 per cent. In 1953, $10,000,000 was paid on $800,490,000. That's 1.2 per cent. And in 1954, $15,000,000 was paid on $1,055,446,000. That's 1.4 per cent.
>
> Where now is that business "yardstick" about which we have heard so much through the years? The figures I have just mentioned and many others which show the lack of interest payment, no federal taxes, and token amounts paid to the states and the communities reveal the cold stark truth of the matter. In short—by good business standards with which TVA originally sought to compare its operations, the TVA yardstick is now about 17⅜ inches long. The rest is government subsidy and privilege. And it is most interesting to note that in the past few years while the Congress has become increasingly reluctant to issue any more blank checks for TVA steam power expansion we have heard less and less of the "yardstick" term.

CONGRESSMAN Dondero feels that the public is slowly becoming aware of what he calls the real nature of the TVA power enterprises. Can it be that it is for this reason that the many "benefits" of TVA and the "yardstick" concept are suddenly being soft-pedaled? He finds an answer "right from the valley" in the wake of the raging debate on the Dixon-Yates contract. The Michigan Congressman notes:

> . . . No less an authority than *The Knoxville Journal* in the heart of Tennessee commented recently that the "politicians and the political organization known as 'Citizens for TVA, Inc.,' may in fact be hastening the end of the power project which they are ostensibly trying to preserve." The Tennessee paper adds: "This may well come about through familiarizing the people all over the nation with the financial details of TVA's operations and the

favored spot occupied by all its power users." The *Journal* continued with the observation that there once was a period when little was said about the financial operational basis of TVA and that under a "spiritual cover" the fact that "the biggest power empire in the world was being built with federal funds was completely ignored." Then came the Dixon-Yates debate.

"Thinking only of the political hay they felt they could harvest here in the state," the editorial stated, "a large assortment of 'saviors' of TVA made their appearance, including the 'Citizens' group.

"The result has been an unparalleled concentration of attention on the power costs under TVA, with special pleading even outside the state that our area be allowed to maintain its favored position . . . The bad part of it is that other U. S. citizens now know, as a result of all the speeches and newspaper interviews, that these rates do not stem from any mystic TVA formula but straight from the federal treasury."

The Knoxville paper concludes with the observation that the opponents of the Dixon-Yates contract "have let the cat out of the bag, defying the rule, old as the human race, that if you have a good thing it is best to be quiet about it."

Like a piece of wet yard goods now hanging in the hot sun of public scrutiny, as Congressman Dondero phrased it, the yardstick is shrinking, shrinking, and shrinking. The shibboleth of "yardstick" has contributed heavily to the extraction of eleven hundred million dollars in appropriations for TVA. And he concludes that as the fiscal and physical realities become more and more apparent, "this catch phrase is being quietly buried without ceremonial obsequies in an unmarked grave for outworn words."

"A GREAT *number of our citizens are faithful members of the church of their choice. In many instances, they are students of church and Biblical history. They practice daily reading of the Bible and commit sections of it to memory. But I often wonder if they are fully aware that the same freedom which permits them to enjoy the religion of their choice, is the same freedom they stand to lose under collectivism. Christianity and freedom have come down to us as though they were one unit, yet how many individuals who can recite the Twenty-third Psalm have ever explored the soul-effacing theories of* DAS KAPITAL*? How many are familiar with the philosophy and theories of John Maynard Keynes, the British economist who has so influenced our economic reasoning in recent decades? Familiarity with such perverted thinking soon brings one to realize that you cannot reconcile Communism with Christianity, that there is no similarity between the parable of the talents and Keynesian economics.*

"*'If America is to be run by the people,' as Herbert Hoover has said, 'it is the people who must think.' And we do not need to put on sackcloth and ashes to think. Nor should our minds work like a sundial which records only sunshine. Our thinking must square against some lesson of history, some principles of government and morals, if we would preserve the rights and dignity of men to which this nation is dedicated.*"

—CLIFFORD H. HOOD,
President, United States Steel Corporation.

The March of Events

Arkansas

Increased Gas Rates Sought

A PETITION for an increase of $4,294,-007 a year in rates paid by its 66 large industrial customers was filed by the Arkansas Louisiana Gas Company last month with the state public service commission.

Declaring the increase was needed to offset the rising cost of gas purchased in the field, a company spokesman said that the rates of residential and light commercial customers would not be changed.

The commission a few months ago approved a $2,269,240 rate increase for the company after it had asked $3,654,-000. That increase applied to all customers and the commission order later was appealed to Pulaski county circuit court by the company and representatives of the gas users alike.

Iowa

Utilities Commission Proposed

A BILL to create a state public utilities commission, empowered to regulate power and gas companies, was favorably reported to the state house of representatives recently by its public utilities committee. Phone companies, rural electrification co-operatives, and municipally owned utilities would be exempt from regulation under the measure, which has the support of privately owned utilities.

The commission would consist of three members, named by the governor to 6-year terms at salaries of $7,500 a year. Besides controlling rates of gas and power companies, the new agency also would regulate such factors as safety and service.

Utility rates in Iowa now are regulated by some 600 city and town councils. Privately owned utilities supporting the bill serve more than 80 per cent of the state's consumers.

Kentucky

Gas Rate Refund Ordered

FRANKFORT KENTUCKY NATURAL GAS COMPANY and Union Light, Heat & Power Company were ordered last month to refund some of the increase in gas rates they have been charging since November

1st. The Frankfort Company serves retail customers in Frankfort and at Versailles and Midway.

The firm last May 24th applied for a $91,990 annual rate raise and put it into effect under bond November 1st. The bond was to assure refunds if any or all of the proposed rates finally were turned down.

On March 23rd the state public service commission directed that the rates be reduced by $47,708 a year to return the Frankfort Company an annual gross income of $784,104, instead of the $831,812 it sought. The remaining $44,282 of the originally requested $91,990 increase will stay in effect, subject to refund, in whole or part, depending upon rates finally allowed Central Kentucky Natural Gas Company by the Federal Power Commission.

In the Union Light Case it was given state authority to increase retail gas rates by $376,794 a year. The commission order granting the raise specified that the higher charges would be temporary rates. Setting of final rates will await outcome of an application for wholesale rate raises by Union's supplier, Central Kentucky, before the FPC.

Union, which serves several northern Kentucky communities, had asked for higher rates to bring it about $530,000 in additional revenue a year. These rates were put into effect last November 1st.

Maine

Repeal of Power Export Ban Urged

REPEAL of Maine's 45-year-old Fernald law, which bans the export of electricity produced by water power, was advocated last month by Chairman Sumner T. Pike of the state public utilities commission at a hearing conducted by the state legislative committee on public utilities. He was supported by L. H. Alline, president of the Maine Public Service Company, in favoring a repeal bill, as part of Governor Muskie's program.

However, it was reported that Harold F. Schnurle, vice president of Central Maine Power Company, urged that the legislature instead pass a bill introduced recently which would permit a power company to export power so long as the amount of steam or diesel power it generated or bought exceeded the amount exported. The Fernald law had never prohibited transmission of steam power.

Nebraska

Commission Bill Rejected

THE state senate judiciary committee last month rejected a bill which would have changed the state railway commission from an elective to an appointive body and changed the name to state public utility commission.

Nevada

Rate Measure Enacted

A BILL to allow public utilities to increase disputed rates while court action is pending was given final passage by the state legislature last month and sent to the governor for signature.

Under the measure, utilities turned down by the state public service commission on rate increase applications will be able to obtain court injunctions and boost the disputed rates while court action on appeals is pending.

The utility, however, would have to file a bond covering the amount of the increase.

New Mexico

Utility Regulatory Plan Approved

A PROPOSED state constitutional amendment for revision of the state's public utility regulatory machinery was given final approval by the state legislature last month for submission to the electorate.

Effect of the amendment would be to empower the legislature to provide for regulation of public utilities, and, if it so decided, to create a new single commission to administer such regulation. Whether such a commission would be elective or appointive would be left to future legislatures to determine. Also approved by the 1955 legislature, however, were companion bills, contingent upon the constitutional amendment's approval by the voters, calling for an elective public utility regulatory agency.

Oregon

Pipeline Bill Approved

A BILL to require a new gas or pipeline company coming into a territory to get a certificate of convenience and necessity from the state public utilities commissioner was given final passage by the state legislature recently and sent to the governor for signature.

The measure was reported to stem from prospective piping of gas into Oregon.

Pennsylvania

Gas Storage Plans Announced

PLANS to use depleted natural gas fields in the state as underground storehouses for surplus gas from the Southwest were announced recently by Governor Leader. To effectuate it, he appointed Dr. John C. Calhoun, Jr., professor of petroleum and natural gas of the Pennsylvania State University, to the staff of the State Department of Forests and Waters.

Tennessee

Anti-Dixon-Yates Bill Signed

GOVERNOR Frank Clement on March 25th signed a bill designed to prevent any Dixon-Yates power from being brought into Tennessee. The bill would require approval of the state public service commission before any private electric companies out of the state could construct transmission lines into Tennessee.

Under the proposed contract between the Atomic Energy Commission and Dixon-Yates, a private power combine, Dixon-Yates would build a steam plant at West Memphis, Arkansas, and channel power into the TVA system at Memphis.

Progress of Regulation

Allocation of Gas Transmission Cost

THE Louisiana commission allowed a natural gas company a modified rate increase to produce a 6 per cent return. But it excluded from the rate base an amount reflecting the excess of purchase price over original cost of properties and it revised gas cost allocations.

The company had elected to write off the excess cost to surplus but now sought to reinstate it for rate-making purposes. If the company had started amortizing the amount from the day of purchase, it would have long since been completely written off the books.

The company, in allocating gas transmission and distribution costs, had arrived at an average distributing cost on the basis of peak-day delivery. The commission said that the effect of such a formula would be to burden Shreveport with an artificially high transmission cost and require it to subsidize to some extent the cost of delivering gas in Little Rock. It undertook to work out a method of allocating to Shreveport a "realistic" transmission cost which would give effect to the mileage factor.

The company contended that average transmission cost was proper because, although the distance was greater for gas transmitted to Little Rock, the load factor at the Arkansas end of the line was higher than in Louisiana. The commission did not agree that this difference in load factor alone was sufficient to offset the inequities caused by using a simple average in computing transmission costs. It employed an engineering firm to make a flow study and to work out an equitable method of arriving at the transmission costs fairly allocable to Louisiana.

The engineers did not depend on one factor as the company did. They used a mileage factor after having determined a geographic center of production in relation to a geographic center of distribution. In addition, they determined the load factors in Arkansas and Louisiana separately. They also determined factors based on peak load and on volumes of gas delivered and sold.

These studies indicated that gas supplied to Louisiana traveled an average of 28.8 miles as against a system average distance of 128 miles. Conversely, the studies indicated a higher system load factor than in Louisiana, thus offsetting the lower mileage factor to some degree. The commission was of the opinion that this study was more equitable than a study that ignored all elements except peak-day demand.

Purchased Gas Allocation

The company contended that all gas purchased under a contract with a pipe-

line supplier was allocable to Louisiana. The commission, noting that the company also purchased gas from a vast number of suppliers under contract, thought that the selection of this particular contract as the only one to apply exclusively to the state was arbitrary. The commission classified the gas under dispute along with all other system gas purchased and produced. *Ex Parte Arkansas-Louisiana Gas Co. Docket No. 6445, Order No. 6622, October 29, 1954.*

Small Water Company Granted Rate Increase Despite Service Deficiencies

THE California commission authorized a small water company to increase its rates, notwithstanding evidence of serious service deficiencies. Instances of low pressure, insufficient water, dirty water, and wasting of water due to leaky mains were numerous. One reservoir could not be used until its roof was replaced. Such deficiencies had existed over a period of years.

The commission commented that applicants, in seeking and being granted the privilege of operating as a public utility, covenanted with the state that they would perform their duties as a utility. One of these duties, and a most fundamental one, it was noted, was the furnishing of reasonable and adequate service to the public at reasonable rates without discrimination.

As just compensation for the performance of such duty, the utility was entitled to an opportunity to earn a reasonable return upon the property lawfully devoted to the public.

Return Allowance

A return of 6.6 per cent was allowed, which the commission considered reasonable. However, the company was required to correct existing system deficiencies and to render reasonable and adequate service. The additional revenues authorized were predicated upon the faithful performance of the ordered improvements and the rendition of reasonable and adequate service.

A request by the company to consolidate its indebtedness into one note was also approved. The note was secured by a deed of trust. The commission found that the money, property, or labor to be procured or paid for through the issuance of such note was reasonably required by the company for future improvements. *Re Lucerne Water Co. Decision No. 51019, Application No. 35743, January 25, 1955.*

Annual Storm Damage Reserve Created

THE New York commission, in examining the rates and charges of an electric company, allowed the company to charge to operating expenses each year amounts which would create a reserve for future storm damage. If future events proved that general weather conditions in the territory had changed, the method employed would provide a means of meeting such changed conditions and eliminate the necessity of absorbing in a single period of one calendar year the full impact of damage that could be caused by one disastrous storm.

An upper limit was set on the reserve and the program was to be altered to con-

form to actual future experience in order to eliminate the possibility of burdening the consumers with amounts in excess of those necessary to meet proper operating costs.

The commission noted that an alternative would be to place all company electric transmission and distribution facilities underground. Noting that such an alternative would greatly minimize wind damage, the commission thought that even underground facilities would be susceptible to other elements of storm damage such as lightning and flooding. Although density of use justifies and requires the construction of underground facilities in certain areas, to place all the company's facilities underground at current prices would inevitably lead to higher rates than those presently existing. *Re Long Island Lighting Co. Case 13236, January 31, 1955.*

Rate Increase and Extension of Primary Calling Areas Denied Telephone Company

THE Illinois commission denied a telephone company's application for increased rates which would yield gross revenues of almost $25,000,000 more than present charges. It was noted that since 1947 the company had been allowed rate increases in excess of $70,000,000.

Extended Area Service

In addition to presenting the usual issues of a telephone rate case, the proceeding involved a proposal to enlarge the primary calling areas in various localities within the state. The commission defined a primary calling area as "one in which a subscriber who elects to use flat rate service can make unlimited calls to other subscribers in that area for a fixed monthly charge."

The three areas affected by the proposed change were (1) the down-state areas, (2) the Chicago metropolitan territory, and (3) the city of Chicago. The commission's general views on the proposal were stated in this way:

> We are of the opinion that the problems and desirability of the proposed extended primary calling area which create a change in the company's present rate structure are of such importance that they should be the subject of a separate investigation and not made a part of this proceeding which is basically a general rate case. Generally, revenue adjustments should be superimposed on such rate structures as exist.

As to the down-state areas, the commission did not see much merit in the proposal. The community of interest between these areas and the large city had not been clearly established. In regard to the Chicago metropolitan area, the commission observed that optional extended area service had been available since 1947 and that only 33.4 per cent of the company's subscribers had availed themselves of it. In view of the overwhelming number of subscribers retaining only local service, the commission refused to force an even larger metropolitan service upon the subscribers on a nonoptional basis. No change was found necessary in the Chicago exchange's rate pattern.

Book Depreciation Reserve

The commission's staff contended that the book depreciation revenue should be increased by the amount of the deduction therefrom made in connection with the refunds paid by the company following

the decision of the United States Supreme Court in the case of Lindheimer *v.* Illinois Bell Teleph. Co. (1934) 292 US 151, 3 PUR NS 337. The theory behind this claim was that the company never changed its depreciation rates after the Lindheimer Case although the refunds were charged against the reserve. Thus, it was contended, the measure of depreciation on an original cost, straight-line basis is the book reserve only if the Lindheimer deduction is added back. This contention of the staff was overruled with this comment:

> If the adjustment here contended for were to be allowed, it would result that a depreciation deduction would be made which the courts and this commission in earlier proceedings have found to be excessive. Even though the company did not acquiesce in the conclusions as to its depreciation rates, the company fully apprised this commission of the account handling of the Lindheimer refunds, and no objection was raised in connection therewith.

Separations and Rate Base

The commission used the Charleston modification of the Separations Manual to apportion telephone plant, revenues, and expenses. Testimony was accepted as to both original cost and reproduction cost in the determination of a proper rate base. Property held for future use and plant under construction were included in the rate base but no working capital allowance was permitted.

Return Allowance

A claim that some additional return allowance should be allowed for so-called "economic depreciation" was rejected. The commission said that to make allowance for this factor is to use a reproduction cost basis for computing depreciation and in effect would yield greater earnings than allowed by state law. A 5.5 per cent return was found reasonable, and since existing rates would provide such a return, the application was denied.

Finally, the commission noted that recently both the New York and Michigan commissions had denied rate increase applications by Bell system companies in those jurisdictions. In both cases the companies were earning a return less than Illinois Bell. *Re Illinois Bell Teleph. Co. No. 41606, January 13, 1955.*

Depreciation Computed on Investment Cost to Purchasers Instead of Original Cost Upheld by Court

THE Wisconsin supreme court was called upon to review a lower court's dismissal of a transit company's appeal from a commission rate order. The property had been purchased and the new owners had applied for a rate increase. The commission had authorized certain limited increases which the new owners did not consider sufficient.

Contending that the commission had erroneously based depreciation on the purchase price rather than the original cost and, consequently, found a 7.35 per cent return on the net purchase price, the company had appealed to the courts after a rehearing had been denied. The company claimed that only a 2.91 per cent return would be forthcoming if the commission had used original depreciated cost.

While the appeal to the lower court was pending, the commission granted further interim increases, which it later made permanent.

The lower court dismissed the com-

pany's appeal on the grounds that it had become moot.

The higher court held it had jurisdiction to review the methods employed by the commission in computing depreciation since the company contended that such methods resulted in unreasonable and confiscatory rates. The question had not become moot by reason of the rate relief subsequently granted by the commission. The later relief was based on the company's depreciation allowance being computed on the purchase price also. The controversy over the depreciation presented a continuing controversy.

The court commented that whatever accounting method the commission employed in computing allowable depreciation in a rate case would not be disturbed upon judicial review unless it in itself resulted in producing unjust or unreasonable rates. In concluding that the commission's computation did not result in unreasonable or confiscatory rates, the court made the following statement:

> We are primarily here concerned with whether basing allowable depreciation on petitioner's actual investment cost results in unreasonable fares. If the resulting fares are determined to be reasonable, then there is no constitutional problem presented of confiscatory rates or fares, as pointed out by Mr. Chief Justice Stone in Federal Power Commission *v.* Natural Gas Pipeline Co. of America *supra.* (See 315 US at p. 586, 42 PUR NS at p. 137.) From the standpoint of both logic and equity we can perceive no good reason why fares, which, after allowing as an annual operating expense depreciation and amortization charges sufficient to return to petitioner *all of its actual investment cost* of its plant assets over the remaining estimated life thereof, will provide a return of 7.35 per cent on petitioner's net investment cost of the property employed in the business, are unreasonable. It is true that the former owner sold such plant assets to petitioner at a price of $4,905,712.37 less than the depreciated original cost thereof as determined by the commission, and that, under the commission's method of computing future allowable depreciation as an operating expense chargeable to earnings, such $4,905,712.37 of original cost to the former owner will never be recouped out of future earnings of the system. However, it is the former owner and not petitioner who has been prejudiced thereby, not by any action of the commission with respect to allowable depreciation, but by such former owner's voluntary act in selling at a price materially below depreciated original cost.

Milwaukee & Suburban Transport Corp. v. Wisconsin Pub. Service Commission, 68 NW2d 552.

Other Important Rulings

Jurisdiction over Rate Complaints. The Wisconsin commission held that it has jurisdiction to review the rates charged a village by a city for domestic sewage, even though the city does not fall within the definition of a public utility, where another statute gives the commission the power to review such rates upon complaint by a user of the service, and the village comes within the statutory definition of a user. *Village of Combined Locks v. City of Kaukauna, 2-U-4285, December 23, 1954.*

Abandonment of Motor Carrier Serv-

ice. The Colorado commission, in denying a motor carrier's request for authority to abandon service between certain points, held that a pecuniary loss on a branch, in and by itself, without giving consideration to the entire operation, particularly if the entire operation is a reasonably profitable one, was not sufficient justification for abandonment. *Re Greyhound Corp. Application No. 12736, Decision No. 43725, November 29, 1954.*

Additional Freight Charges. The United States court of claims held that a motor carrier was not entitled to recover an additional amount for freight charges on goods carried by it for the federal government in interstate commerce where the Interstate Commerce Commission had decided the question of a reasonable rate to be allowed and the carrier had collected and retained such rate. *New York & N. B. Auto Express Co., Inc. v. United States, 126 F Supp 215.*

Private Carrier Permit Denied. The Colorado commission refused to grant a private motor carrier permit authorizing the transportation of bulk petroleum products where the applicant had failed to produce customer witnesses or show a need for additional service and the application had been protested by existing common carriers. *Re Alberta Gas & Appliance, Application No. 13260-PP, Decision No. 44004, February 25, 1955.*

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NEW YORK PUBLIC SERVICE COMMISSION

Re Rochester Telephone Corporation

Case 16975
December 21, 1954

APPLICATION *by telephone company for authority to increase rates; increase authorized as modified.*

Rates, § 134 — Comparisons.

1. Comparisons of relative rates are never controlling, since facts and circumstances may differ, p. 69.

Valuation, § 287 — Working capital — Adjustment of past figures — Telephone company.

2. A telephone company's proposed working capital allowance was accepted for the purposes of a rate proceeding, notwithstanding that a detailed study applicable to the periods under consideration would be preferable to the approach used by the company, whereby factors developed in earlier proceedings were applied to present expenses, p. 71.

Valuation, § 28 — Rate base — Book cost.

3. The book cost of telephone plant in service, less depreciation reserve, plus the estimate of required working capital, should be used to determine a rate base, p. 72.

Accounting, § 5 — Continuing property records.

4. A telephone company's effort to establish and maintain an adequate and reliable continuing property record should be progressed at an accelerated rate, p. 74.

Return, § 111 — Telephone company — Capital requirements.

5. A return of slightly under 6 per cent was not considered excessive for an independent telephone company needing additional capital for an improvement and expansion program, p. 75.

Rates, § 309 — Telephone connection charge — Business and residence.

6. A proposed increase in the telephone service connection charge for residence service by one dollar a month, the same as for business service, was reduced to 50 cents a month, p. 76.

Security issues, § 99 — Debt ratio — Telephone company.

Statement that a debt ratio of almost 55 per cent indicated a need for the attraction of new equity capital to provide a better balanced capital structure for a telephone company, p. 75.

APPEARANCES: Joseph J. Doran, Acting Counsel (by John T. Ryan, Special Assistant Counsel), for the Public Service Commission; Nixon, Hargrave, Devans and Dey (by Justin Doyle and Frank J. Goodwin, of counsel), Rochester, Attorneys, for Rochester Telephone Corporation;

Honora A. Miller, Corporation Counsel (by Fred B. Goodelle, Deputy Corporation Counsel), Rochester, for the city of Rochester; Hobert L. Himes, Canandaigua, City Attorney, for the city of Canandaigua; D. L. Streppa, Rochester, Village Attorney, for the village of Fairport; Harold C. Parker, Perry, Village Attorney, for the village of Perry; John A. Buyck, Attorney at Law, Rochester, appearing on behalf of the town of Henrietta; Gordon Hiatt, Irondequoit, in his own behalf; C. L. Crane, Webster, in his own behalf; James J. Donnelly, New York, Legislative Representative of the Liberal Party; John Francis Noonan, Rochester, Attorney, for the Liberal Party of Monroe County; Nicholas C. Evans, Rochester, Chairman, Monroe County Liberal Party.

BEDENKAPP, Commissioner: The Rochester Telephone Corporation filed a petition herein dated the 1st day of September, 1954, setting forth briefly its need for additional revenues and the reason therefor. Accompanying such petition was a proposed new schedule of rates designed to meet its claimed need for additional revenues, which schedule, summed up in general terms, provides for rates which would increase business charges by one dollar per month and residence charges by 25 cents per month, with certain variations in miscellaneous items. Such rates contemplate no changes in toll charges or in hotel or wire service charges. The rate schedule, however, was not filed for the purpose of taking effect on a designated date but petitioner prays that this commission, "as promptly as is feasible, verify the foregoing facts by appropriate procedure and permit your petitioner to put into effect . . . a schedule of increased rates sufficient to yield reasonable compensation for the service rendered . . . ."

Notices for a public hearing in the matter were served upon all parties in interest and hearings were held at Rochester on October 20 and November 4, 1954.

It was estimated by company that the suggested rates, if they became effective prior to the 1st day of January, 1955, would yield in the ensuing year additional revenues of $853,802.

Background

The company's last request for a rate increase was considered by this commission on the 29th day of January, 1952, 92 PUR NS 33, when a memorandum was approved permitting company's proposed tariff, as amended, to become effective (Case 15403).

Since the year 1946, Rochester Telephone Corporation has been in the throes of a complete change-over in its operations. The history behind the delay of company to convert to dial operations was comprehensively presented in this proceeding by William A. Kern, executive vice president. The major decision which committed the company to manual operations dates from 1925 when the former management cut into service the Culver exchange. During the period of the thirties when prices and wages were low and widespread unemployment existed, its management was deemed by the industry as a whole to have been farsighted in determining not to install high priced dial equip-

ment far more expensive to operate under then existing conditions.

If we were to paraphase Mr. Kern's testimony in the light of subsequent events it would be stated as follows for the record:

Few there were who were bold enough during the desperate belt-tightening days of the 1930's, when economic maladjustments created poverty in the midst of plenty, to foretell the startling economic and world-shaking events of the 1940's—the dedication of the hitherto excess supply of goods and man-power to the struggle for national existence; the rationing of essential materials and the marshalling of human resources in a manner unparalleled in our history. Scarcities appeared on every hand. Neither materials nor skilled workers were available for the expansion of normal services. Wartime industrial needs competed with peacetime activities for the scanty supply of workers. Wage rates rose and the rapid turnover of employees created inadequacies in the supplies of trained personnel.

These and many other factors caused a marked deterioration in the quality and a heavy increase in the cost of service, particularly in those types of service as heavily dependent upon the human factor as exists in the use of manual equipment for telephone service. What in the 1930's had appeared to be a wise and prudent decision of management had placed the company in an almost untenable position. Events, difficult to foresee, had completely changed the economic picture.

Prescience is rarely superior to hindsight. And, unfortunately, the war years afforded no opportunity to begin the rectification of the situation. Dial equipment was unobtainable and, even if it had been, skilled man-power was unavailable for its installation.

Still the story is only half told. The end of the war released the pent-up demand for the satisfaction of normal human wants. These had been held in abeyance by the lack of earning power in the thirties and had been artificially restricted during the war by a deficiency in the means for their satisfaction. The high tempo of economic activity, the great increase in population, and higher standards of living created an unparalleled demand for countless goods and services including telephones. Thus the need of the Rochester Telephone Corporation to institute a wholesale program for the rehabilitation of its entire plant and the conversion from manual to dial equipment was further complicated by the necessity for expansion to meet the immediate and heavy demands for more telephones. In the eight years since 1946 the average number of stations in company service has increased from 144,932 to 222,108 or 53 per cent. The pressure for new service and for the upgrading of existing service still continues.

Report of Progress

As soon after the war as practicable, the main construction effort of the company was directed toward the installation of modern dial equipment both in the city of Rochester and the suburban territory, although more fully concentrated within the city. New buildings to house the equipment and the most modern Western Electric crossbar No. 5 dial installations have been added in the city of Rochester at the rate of one new central office

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annually. A new dial central office was placed in service in August, 1953, and the cut-over of the dial (BRowning-GReenfield) exchange, scheduled for completion in early December, 1954, has recently been effected. With the addition of this new unit, the conversion program in Rochester has now been 50 per cent completed. The BUtler-HUbbard central office scheduled for completion in December, 1955, will increase the total to 60 per cent. Of 32 central offices, 10 are now dial.

In the suburban territory Victor and Pavilion dial installations were completed in 1954 and both Hamlin and Castile are scheduled for 1955.

This year, for the first time in the conversion program, the replacement of the former Monroe Manual exchange has released a substantial amount of modern manual equipment usable in improving service in other parts of the city. Accordingly, upon the recent cut-over of the former Monroe exchange subscribers to dial, the present Hillside exchange will be retired and Hillside subscribers will be transferred to the Monroe manual exchange. This will relieve the present overloading in Hillside, which has been one of the chief sources of complaints respecting telephone service in the city of Rochester, enable the company to take care of a great number of requests for regrades, and provide sufficient additional switchboard positions to accommodate normal future growth during the period of years which will intervene before conversion to dial. The estimated date for completion is 1960.

Need for Additional Capital

The latest request by Rochester Telephone Corporation for authority to issue new securities was approved by this commission in November, 1954. At that time the company received permission to issue and sell $7,500,000 principal amount of first mortgage 3¼ per cent bonds, series C, to provide funds for its extensive construction program in the conversion to dial equipment. The gross outlay before retirements for the 1954 construction program is estimated at $7,726,500 and for the year 1955 at $7,914,800. The proceeds of such bond sale, however, will not be sufficient to provide the capital necessary for the 1955 construction program and securities will be required to be sold to provide an additional estimated $6,000,000 for such purpose.

Since the present debt ratio of the company, after giving effect to the recent issue of bonds, is 54.8 per cent, it can be assumed that any early future financing will be in the form of equity securities. The attractiveness of such securities in the eyes of prospective purchasers will naturally be based upon earnings sufficient to assure payment of regular dividends. The common stock of the company has, since the year 1948, paid regular dividends of 80 cents per share annually.

The present construction program, which involves a gross annual outlay of approximately $7,750,000 and a net outlay after retirements of about $5,500,000, will not be completed until about 1960, so that the issuance and sale of securities to provide additional capital to defray the cost will be required to continue until its completion.

This provides an added reason, if one be necessary, for ensuring a fair rate of return upon the capital actu-

ally invested in the effort to provide adequate service.

Basis for Request

The grounds for company's request will appear more completely and in greater detail at a later point in this memorandum. Briefly, the claimed need is predicated upon increased labor costs amounting to $382,000 in 1953 and an estimated additional sum of $291,000 in 1954; increases in other expenses; the continued demand for new and better service which entails the continuation of the dial conversion program and the expansion of plant in service to provide facilities for additional customers in a thriving and populous area; and the necessity for adequate earnings to provide and attract the large sums of additional capital required to finance new and improved telephone plant and equipment.

By its approval of the memorandum in Case 15403 in January, 1952, 92 PUR NS 33, this commission took a forward step toward the solution of the problem of better telephone service in the Rochester area. Since that time important strides have been taken by the company and millions of dollars have been invested in the installation of modern dial equipment of the most approved type. The sole question presented in this proceeding is—are additional revenues necessary to provide a fair return on invested capital and to enable the company to continue its improvement program?

Opposition

The opposition to the rate increases sought by the company may be summarized under the following general classifications:

1. General opposition by some individuals and several municipalities based upon doubts as to the company's need for additional revenues, with special emphasis upon the admittedly high rate schedules for local service presently effective in the Rochester area as compared with other allegedly comparable localities;

2. Specific objections to the proposed increases as weighted too heavily upon the suburban localities; and

3. Objections by the representatives of certain municipalities to the proposed increases in the light of the claimed inferiority of service rendered. The most noteworthy complaints in this respect were made by the city of Canandaigua and the town of Henrietta. Testimony outlining the various steps taken by the company to meet these specific service problems was offered by company officials and will be treated in detail under appropriate headings at a later point in this memorandum.

[1] Consideration of the general objections to any rate increase must necessarily be governed by the answer to the main question presented in this proceeding. Comparisons of relative rates are never controlling since the facts and circumstances which are required to be considered in the fixing of rates may differ in a multitude of important particulars.

In the memorandum in Case 15403, *supra,* involving Rochester Telephone Corporation, there is considerable discussion of the various elements entering into the relatively high cost of local phone service in the Rochester area. That discussion was based in

large measure upon the testimony of the late Ward Hinman, for many years the chief telephone engineer of this commission. The main reason offered by him to account for the fact was the material deficiency in toll revenue in the Rochester area.

The testimony in this proceeding is that toll usage remains about the same as in the past, constituting about 15 per cent of total revenue. For comparison, Mr. Kern testified that in Syracuse—a smaller city than Rochester—the average toll revenue per station for the month of August, 1954, was $3.15 as compared with $1.02 in Rochester.

The present schedule of rates, which assigns the various exchanges to three separate rate groups based upon the number of stations served by an individual exchange, was adopted approximately three years ago after a careful study of all the elements involved. If there have been meritorious complaints as to its equitability, they have not been brought to the attention of the commission.

The general effect of the present proposal to increase rates would be to add 25 cents to the present monthly charge for residence service in all rate groups and one dollar in like manner to business service. While such method tends to produce higher percentage increases the lower the base rate, the amount of the increase is not sufficient to distort the present basic rate structure. The alternative of a uniform percentage increase or surcharge would complicate billing procedures for all customers to effect small savings for a relatively few customers served by the smaller exchanges.

Balance Sheets

The following schedule, designated Table 1, set forth company's comparative balance sheets as per company's books for the years ending December 31, 1951, 1952, and 1953, and, for the purpose of providing the latest available figures, as of August 31, 1954. The recent balance sheet figures reflect adjustments prescribed in Case 8579, Fourth Amendatory Order.

It will be observed that net additions to telephone plant in service between December 31, 1951, and August 31, 1954, have totaled $8,972,639, which sum, after giving effect to additional Plant under Construction and Plant Held for Future Use and adjusting for a reduction of one dollar in Other Investments and of $13,225 in Sinking Funds, indicates an increase in Total Investments during the period specified of $12,293,667.

In order to obtain a better picture of company finances and company growth from December 31, 1946, to August 31, 1954, it will be found that Plant in Service increased between the specified dates from $26,513,654 to $48,107,071, or 81.4 per cent, and the Total Investment from $26,884,-149 to $51,682,465, or 92.2 per cent.

The figures reflecting temporary borrowings to finance current plant construction do not take into account the reductions in these items through use of the proceeds of the recent sale of $7,500,000 of bonds issued in part for their payment and retirement. [Table omitted.]

Rate Base

Telephone Plant

As set forth in the balance sheets, *supra* [omitted herein], telephone

plant in service on August 31, 1954, was $48,107,071. The estimate for the full year to December 31, 1954, is $53,260,860. Examination by the commission's staff in this and prior proceedings indicate that the company's books reflect with reasonable accuracy the original cost of its plant and equipment.

The company submitted its plant contruction program for the year 1955 which involves gross additions to plant in service of $7,914,800 and net additions of $5,350,700, resulting in an estimated total of plant in service on December 31, 1955, of $58,611,560. This program which is already planned and budgeted for the year 1955 consists principally of the construction of a new central office in the northeast section of the city and the installation therein of modern crossbar No. 5 dial equipment, such installation to be known as the BUtler-HUbbard exchange and to be ready for service in December, 1955. It also involves the installation of dial exchanges in three suburban communities.

Depreciation Reserve

The balance in the company's depreciation reserve at August 31, 1954, was $14,732,582, while the balance at December 31, 1954, is estimated at $14,522,146. This seeming discrepancy in the depreciation figures, as above, arises in large measure from the retirement of the Hillside exchange combined with other minor year-end adjustments. The estimated depreciation reserve on December 31, 1955, is $14,937,546.

The adequacy of the company's depreciation reserve was not questioned by the commission's staff.

Working Capital

[2] The company did not present a separate working capital study applicable to the periods under consideration. In computing the amounts for working capital, the company applied factors developed in the two prior rate proceedings (Cases 13489 and 15403), with an adjustment to reflect current federal income tax payments.

Thus, in determining the amount of net prepaid expenses to be included in the allowances for working capital, the factor of 2.58 per cent (developed from the amount allowed in C. 13489) was applied to estimated 1954 and 1955 total operating expenses after adjustment for depreciation expense and net wiring loss. A similar allowance (11.4 per cent) was used to determine the amount of operating taxes to be included. The same method was used to determine the respective working capital allowances in Case 15403, *supra,* 92 PUR NS 33.

The amount for materials and supplies was determined by applying a unit value ($4.61 per average station in service), determined by relating the amount actually allowed in a prior proceeding to the estimated average number of stations in service during 1954 and 1955.

The federal income tax credit in Case 15403, *supra,* was computed on the basis of 4 payments (2 of 40 per cent each and 2 of 10 per cent each). In accordance with current tax legislation, this tax credit was computed on the basis of two payments of 50 per cent each.

It may be noted that the company's approach to determining the amount

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of working capital is by no means an accurate one. Any application of factors developed a few years ago is, at best, only a rough approximation and may bear no relationship to current operations. However, the allowances for working capital do not appear to be unreasonable based on the amounts allowed in Case 15403, *supra* (1951 —$538,782; 1952—$440,235). Barring a detailed study applicable to the periods under consideration, which would be preferable, the working capital allowances, as determined by the company, will be accepted for the purposes of this memorandum.

Such allowance for the year 1954 is $694,547, and for 1955 is $550,234.

Computation of Rate Bases

[3] The rate base claimed by the company consists of the book cost of telephone plant in service, less the depreciation reserve balance, to which is added the estimate of required working capital. This is in conformity with the formula consistently used by this commission.

The following schedule, designated Table 2, sets forth rate bases for the years 1954 and 1955 in which the amounts of telephone plant in service and of the depreciation reserve are the averages of the respective balances at the beginning and end of each year: [See Table 2 top of next column.]

TABLE 2

Rate Bases

	1954	1955
Average Telephone Plant in Service	$49,943,212	$55,388,710
Average Depreciation Reserve	14,256,446	14,729,846
Net Telephone Plant	$35,686,766	$40,658,864
Working Capital ..	694,547	550,234
Rate Base	$36,381,313	$41,209,098
Rounded to ...	$36,381,000	$41,209,000

Operating Results under Present Rates

The prevailing rates became effective by order of this commission dated January 29, 1952, in Case 15403, 92 PUR NS 33.

The following schedule, designated Table 3, shows the company's comparative income statement for the twelve months ended September 30, 1953, and September 30, 1954. It demonstrates from actual company experience and, despite noteworthy increases in revenues, the inability of company to translate such gross revenue increases into net income. The facts are self-evident. Increased operating expenses, largely due to augmented labor costs and operating taxes, have absorbed the revenue gains and provided less operating income from which to exact a return for a larger capital investment.

The following Table 3, and Table 4 which shows actual company income for the calendar year 1953, eight months actual and four months estimated for the calendar year 1954, and estimated for the year 1955, were presented by Mr. Arthur S. Gibson, vice president in charge of finance. [Tables omitted.]

Operating Revenues

The estimate of operating revenues under present rates was made by Mr. F. Mark Clark, the company's commercial engineer. It was based on an estimated net gain in stations (11,739 in 1954 and 9,610 in 1955) and, among other things, took into consideration such factors as the present

and the predicted future levels of business activity and employment, population growth, wage levels, and wage earners per family. The estimate assumed that business and employment conditions in 1955 would be as good as in 1954. Toll revenues are expected to constitute the same proportion (15 per cent) of total revenues, as in the past. The original estimate for 1954 was made in October, 1953, and revised slightly upon review in May, 1954. For the eight months ended August, 1954, the estimate was only .18 per cent above the actual data for that period.

Operating Expenses

The estimate of operating expenses was based on past experience, anticipated business activity, estimated number of telephones in service, cost of retirement and training of personnel, wage levels and trends, and numerous other pertinent data. In general, wage increases constitute the largest single item of expense responsible for the estimated increase in operating expenses in 1955 over 1954.

Wages

Wage increases to the two employee-unions were made effective January 4, 1953, and January 4, 1954. Further increases to employees of one of these unions were made effective May, 1953, and June 17, 1954, and increases were granted to nonunion employees effective January 1st of each of said years. These wage contracts are of one-year duration and renewals thereof thus far have resulted in increasing the company's operating expenses. Mr. Gibson presented data indicating that payroll and related costs were increased by $670,310 due to the above-mentioned wage increases, of which $87,230 was chargeable to construction, leaving $583,080 chargeable to operations.

In 1953, wages constituted 65 per cent of total operating expenses. The impact of the wage factor on estimated 1954 and 1955 expenses can be clearly observed from a few illustrations. For example, maintenance expenses in 1954 increased by $321,936 over 1953, of which $265,000 represented wages and the increase in 1955 over 1954 was estimated at $164,600, of which $153,000 would be wages. Traffic expenses in 1954 are expected to exceed 1953 by $107,442, of which $102,100 would be due to wage changes. However, such expenses are expected to decrease by $228,400 in 1955, as compared with 1954, reflecting the estimated savings in handling costs to be effected by the installation of the BRowning-GReenfield dial central office.

Depreciation Expense

Depreciation expense was developed by applying current depreciation rates to the average monthly balances estimated for each depreciable account, except for large additions on which depreciation is computed separately. The annual accrual for 1954 was estimated at $1,527,700 of which $1,130,848.39 was actually accrued in the first nine months of the year. Mr. Gibson presented a detailed explanation of the computation of depreciation expense ($1,677,700) estimated for 1955.

No question as to the propriety of these estimates was raised by the commission staff.

Taxes

The estimate of operating taxes and federal income taxes was based on current statutory rates taking into consideration all pertinent known factors affecting the computation.

Operating Ratios

As measured by operating ratios, total operating expenses constituted 89.1 per cent of total operating revenues in 1953 and 89.3 per cent for the first eight months of 1954, leaving a little over 10 cents out of every dollar for fixed charges, dividends, and retained earnings.

Maintenance Cost—CPR Records

[4] Before leaving the discussion on expenses, it may be noted that, on a per station basis ($14.61 in 1953 and an estimated $15.26 for 1955), this company's maintenance cost appears to be rather high. In addition, the company's records are not maintained so that any separation can be made between maintaining dial as compared with manual equipment. The record also indicates that although the company has some kind of descriptive continuing property record—it is far from complete or satisfactory according to commission standards.

In connection with the first point, Mr. Gibson felt that on the basis of the type (dial conversion) and amount of work being done and considering the high labor component of the total cost involved, maintenance costs were not too high.

As for the second item, the company's books and records are still under examination by members of the commission staff. The matter of maintaining a proper continuing property record arose in connection with contemplated retirements. Mr. Gibson was not sure whether existing records for the Monroe exchange, for example, would show the cost of the lines when installed. He testified that the CPR record was maintained by the engineering department, and the corresponding dollar amounts by the accounting department, and that he was unaware how much of a breakdown was available for any specific item. With regard to retirements, particularly, he stated that in some instances the company has estimated the original installation cost of items, rather than make any determined effort to ascertain the actual cost—but that this was not the standard practice. He testified that the present procedure was to trace the item back to its original cost and to retire it as near as possible to such cost; that when the installed date is not known, the company approaches the manufacturer or builder to obtain such cost data. In his opinion, the company was making a determined effort to establish and maintain better records; that its present records were not perfect, but that they were improving all the time; and that the CPR record for this company would not be completed in less than one year, and may take longer.

The present effort of the company to establish and maintain an adequate and reliable continuing property record should be progressed at an accelerated rate.

Present Rates of Return

The rates of return on rate bases described hereinbefore for 1954 and 1955 under present rates may be shown, as follows:

	1954	1955
Estimated Net Operating Income	$1,797,800	$2,077,600
Rate Bases	$36,381,000	$41,209,000
Rates of Return	4.94%	5.04%

If a deduction be made for Pension Costs now charged to Miscellaneous Income (an item not claimed by the company in this proceeding), the above would become:

Estimated Net Operating Income	$1,797,800	$2,077,600
Less: Pension Costs Charged to Miscellaneous Income	84,954	84,954
Earnings Available for Return	$1,712,846	$1,992,646
Rate Bases	$36,381,000	$41,209,000
Rates of Return	4.71%	4.84%

Estimated Return under Company's Proposed Rates

A comparison of present and proposed monthly rates, showing the amount of increase by type of service, as presented by Mr. Clark, is shown in the Appendix attached hereto [omitted herein]. Assuming said rates become effective January 1, 1955, they are estimated to produce $853,802 in additional annual revenue in 1955.

The estimated rate of return during 1955 under the rates as proposed by the company may be computed, as follows:

	1955
1. Rate Base	$41,209,000
2. Amount Available for Return at Present Rates	$2,077,600
3. Gross Additional Revenue from Proposed Rates	$853,800
4. Net Amount Available from Proposed Rates (Line 3 × 46.45 per cent)	$396,600
5. Amount Available for Return at Proposed Rates (Lines 2 + 4)	$2,474,200
6. Rate of Return	6.00%

Rate of Return

[5] Company offered no opinion evidence of a specialized character to bolster its claimed need for additional revenues to provide a higher rate of return. Nor did it attempt to introduce evidence upon which might be based the right to a return on other than the original cost of its property devoted to the public service. It requested only that it might be permitted revenues sufficient to earn a return upon its net investment so that it might be able to attract the necessary capital to continue the expansion and improvement of its telephone facilities.

The record demonstrates that on the basis of eight months' actual and four months' estimated earnings, the return on company net investment for the calendar year 1954 had slipped below 5 to an estimated 4.94 per cent. This occurred despite the continuous and healthy growth in operating revenues because, unfortunately, increased labor and other operating expenses, including taxes, had more than consumed the gains attributable to improved gross earnings. Reflecting the first indications of economies resulting from its major dial conversion program, estimated net operating income for the year 1955 will yield 5.04 per cent on the substantially increased plant in service.

The improvement program is, however, less than half completed. The issuance and sale of many millions of dollars of new company securities to raise capital to finance the completion of the dial conversion program lies ahead. The present debt ratio of almost 55 per cent indicates a need for the attraction of new equity capital to

provide a better balanced capital structure. Proverbially the over-all cost of equity exceeds that of debt capital.

Rochester Telephone Corporation, while a company of substantial size, is an independent. It is not affiliated with a far flung and universally recognized corporate enterprise, which can tap the surplus capital reservoirs of every community of substantial size in the nation and many in foreign countries. The field of small utility companies for the raising of needed capital is necessarily restricted and naturally limited to a much smaller segment of the business world. It has no ready market for its securities. Their sale on advantageous terms rests largely upon the attractiveness of the offered return and the financial stability of the enterprise. The issues of such companies must pay through more liberal terms what they lack in seasoning and public acceptance.

Frequent rate proceedings are not beneficial to any company from the standpoint of subscribers' relations. It would appear, therefore, that, at the present juncture in company's improvement program, a return of slightly under 6 per cent for the 1955 calendar year would not be excessive. It may well be that the additional revenues derived from the proposed schedule of rates, as modified herein, combined with improved procedures and controls looking toward economies in future maintenance and traffic expenses—economies which are seemingly potentially present as the dial conversion program progresses—will see this company through the latter half of its major improvement and expansion program.

Rates Proposed by Company

The basic rate pattern for this company dividing the exchanges outside of the city of Rochester into three groups according to the number of telephones that may be called without a toll charge, was established as an outcome of the two prior rate proceedings (Cases 13489 and 15403, *supra*).

Mr. Clark stated the standard objectives of a rate schedule as one designed to attract more customers, to encourage full use of the service by existing customers, and to produce the required additional revenue. He was requested to produce a rate schedule that would increase local service revenues by $815,000 on an annual basis. Among other things, he took into consideration the fact that the schedule should distribute the revenue requirement equitably, the value of service rendered and broad cost considerations, the rate relationships between existing grades and classes of service, customer acceptance, and facility of administration.

Except for certain variations in miscellaneous items, the rates as proposed by the company would increase business charges by one dollar per month and residence charges by 25 cents per month. Percentage-wise, it appears at first glance that the greater burden of the proposed increase will be borne by the smaller communities. However, dollar-wise, such communities provide a very small amount of the company's total revenues.

[6] The rate structure, as proposed, does not distort the basic pattern heretofore established. However, I recommend that the proposed rate schedule be changed in one particular.

As submitted by the company, service connection charges for residence service would be increased by one dollar per month or the same amount of increase as is proposed for business service. This appears to be rather high considering the nature of the service rendered. I believe that an increase of 50 cents per month in Schedules 1 and 2, with no increase in present charges for equipment in place (Schedule 3), would be more acceptable to subscribers and would eliminate a considerable cause of customer resistance. Such reduction will not materially affect the required amount of additional revenue sought by the company.

The following tabulation illustrates the changes in service connection charges for residence service as proposed by the company and as recommended herein:

Service Connection Charges

Residence Service

	Proposed by Rochester Teleph. Corp.		Recommended	
	Proposed Charge	Increase over Present Charge	Recommended Charge	Increase over Present Charge
Schedule 1				
Main Stations, Auxiliary Lines P.B.X. and Intercom, Trunks, Each	$5.00	$1.00	$4.50	$.50
Extension, P.B.X. and Intercom, Stations, Each	4.00	1.00	3.50	.50
Schedule 2				
Main Stations, Auxiliary Lines P.B.X. and Intercom, Trunks, Each	4.50	1.00	4.00	.50
Extensions, P.B.X. and Intercom Stations, Each	4.00	1.00	3.50	.50
Schedule 3 (Equipment in place)				
Rochester Exchange Residence, All Units Reused	4.00	1.00	3.00	None
Other Exchanges Residence, All Units Reused	4.00	1.00	3.00	None

A comparison of present and proposed rates, including the above recommended changes, appears in the appendix attached to this memorandum.

Service Complaints

Hillside

It has been heretofore noted in the discussion with regard to the company's dial conversion program, that upon completion of the BRowning-GReenfield dial central office (completed since last hearing) the present Monroe subscribers would be transferred to dial service and the present Hillside subscribers would be transferred to the manually operated Monroe exchange. Also noted was the fact that such transfer would result in improved service to Hillside subscribers who now are served by equipment that is overloaded. This will also enable the company to fill some 1,500 requests for regrade in service in the Hillside exchange and provide for probable growth until 1962.

Canandaigua

Present equipment was placed in service during 1937–1938 in Canandaigua, consisting originally of a com-

bined toll and local service board with 8 positions, which has been expanded to 16 positions. The last installation was put in service in August, 1954, several months beyond the scheduled date, due to delay in delivery of equipment by the manufacturer.

Mr. William A. Pitbladdo, the company's traffic superintendent, testified that the present cable facilities serving this area are sufficient; that there are no held orders; that the labor turnover was high and new operators were being trained on a continuous basis. He considered the service rendered last summer to be under par, but stated that the company had corrected certain equipment faults and has provided for improved maintenance in this area.

He also testified that the company is following certain recommendations made by the commission staff, to correct traffic and maintenance difficulties found upon inspection. In accordance therewith, a clerk had been put on to relieve the chief operator of clerical duties, so that more time could be devoted to supervising switchboard operations. In addition, information, interception, and rountine work have been taken off the switchboard and transferred to a separate table.

Following the testing of equipment installed in December, 1954, the handling of toll and local calls will be separated to some extent, thereby providing a better grade of service (by segregating delays due to toll work and by reducing the average answering time). With the installation of a separate toll board, scheduled for July, 1955 (manufacturer's date), the present board will be free to handle local service calls only.

Mr. Pitbladdo noted that additional positional toll switch trunks will be installed on the Canandaigua board when Hillside subscribers are moved over to the Monroe board, making such equipment available. He testified that no specific date has been set for conversion to dial service in Canandaigua; that the older control offices would be converted first; and that such conversion had been delayed in part due to concentration on city dial conversion and in part to delay in receiving necessary equipment.

Henrietta—Irondequoit

In response to inquiries with respect to service rendered in Henrietta, Mr. Clark testified that the base rate area was small and that the area served was predominantly rural in nature, with small hamlets spread out in many directions. The town is served in part by the Rochester exchange, in part by the Pittsford exchange, and in part by the Rush and Henrietta exchanges. Mr. Clark stated that the objective in establishing the existing service boundaries was to provide residents within a specified area with the opportunity to make the majority of their calls without necessitating a toll charge.

Until last April, growth in this area was modest (the reported net gain in stations being 314 between 1950 and 1954), and some $122,000 had been spent by the company on outside plant facilities. Last April, about 300 prefabricated homes (200 of which have now been completed) were erected in an area some 6 miles distant from the central office. In order to accommodate people in this suburban area, the company has already spent about $78,000 and plans to spend $150,000 more

in 1955 on plant improvements. Mr. Clark testified that facilities are now available to serve all residents of the new homes and, upon completion of the cable work now under way, all subscribers will be able to get a high grade of service.

In connection with Irondequoit, Mr. Kern testified that the Charlotte exchange was about the smallest central office operated by the company and that conversion to dial service ahead of schedule would depend largely upon growth or increased demand for service in this area.

Conclusion

During the three years intervening since its last rate proceeding, Rochester Telephone Corporation has made healthy strides toward the complete regeneration of its plant and facilities. For the city of Rochester that program is half completed and the coming year will progress it well along toward the two-thirds mark. In achieving its present improved status, the uphill climb has been marked by the recent diligent efforts of company's management and personnel, but particularly by the patience of the general public and an unusual complement of understanding upon the part of its customers. Few welcome a relatively high level of rates and the many may be pardoned for grumbling when such status is combined with less than superior service.

Part of the hoped-for improvement has already been realized. It would be little less than tragic at this critical juncture, in the forward progress, if the company were denied the means to attract, on reasonable terms, the large volume of additional capital it requires for the fulfilment of its ambitious program. It needs more equity capital, considering its present high debt ratio, to achieve a better balanced capital structure and secure needed funds for complete conversion to dial service. It cannot do so with its present operating revenues. Taxes alone will absorb more than 50 per cent of the proposed increase.

Diligent efforts and a bit more patience will finally achieve for Rochester and its surrounding communities the high quality of telephone facilities and service to which they should be entitled.

I recommend that an order be adopted permitting Rochester Telephone Corporation to file and make effective, on short notice, its proposed tariff as amended by the changes in service connection charges specified herein.

CALIFORNIA PUBLIC UTILITIES COMMISSION

Re San Jose City Lines, Inc.

Decision No. 50745, Application No. 35264
November 4, 1954

APPLICATION *by transit company for authority to increase fares; modified increase authorized.*

Service, § 184 — Extension of carrier's line — Prospective patronage.

1. The commission will not require the extension of a transit company's lines to new residential developments unless such extension is practical and has a rational chance of being sustained by the patronage, since present patrons should not be burdened with higher fares or suffer service curtailments or impairments because of premature or other nonsustaining extensions to newly developed areas, p. 83.

Expenses, § 26 — Business promotion plan — Transit company.

2. A transit company's business promotion plan to stem the loss of patronage and attract additional traffic is in the public interest and the cost should be allowed as an operating expense, p. 84.

Valuation, § 28 — Depreciated book cost — Transit company's properties.

3. A rate base comprised mainly of substantially depreciated book cost of a transit company's properties is unrealistic and distorted when such cost does not reasonably represent the reasonable use value of the equipment, p. 85.

Return, § 108 — Transit company — Cost basis.

4. A return of 13.8 per cent, calculated upon the substantially depreciated book cost of a transit company's properties, was considered reasonable where, if the reasonable use value of the equipment were provided for in the rate base, the return would approximate only 9.7 per cent, p. 85.

APPEARANCES: John F. Balaam and George H. Hook, for applicant; Robert J. Costello, for city of San Jose, interested party; R. E. Morgan and J. F. Base, for city of Santa Clara, interested party; Eugene F. Foley, for David Bohannon Organization, interested party; W. E. McCartin, in propria persona, interested party; William R. Roche and John L. Pearson, for the commission's staff.

By the COMMISSION: San Jose City Lines, Inc., is a passenger stage corporation engaged in the transportation of passengers within and between the cities of San Jose and Santa Clara and between those cities and adjacent areas. The fare structure for these operations is based upon three fare zones. The present fares are 10 cents cash for transportation within any one zone and 15 cents and 20 cents cash for the respective interzone movements. Tokens are offered at the rate of three for 25 cents and one

token is accepted in lieu of 10 cents cash. For school children, the fares are $1 for 20 intrazone rides and $1.20 for 20 interzone rides.[1] By this application, filed March 19, 1954, the company seeks authority to raise the present intrazone fare to 11 cents cash and the interzone fares to 16 cents and 21 cents cash, without tokens being offered. Authority also is sought to increase the 20-ride school fares to $1.20 for movement in any one zone and $1.60 for interzone movements.

A public hearing of the application was held at San Jose on June 9, 1954, before examiner Henry Jacopi.

Earning Position

Applicant alleges that substantial advances in the cost of operation, particularly wages, and a steady drop in the traffic volume have rendered the earnings from the present fares inadequate and that additional revenue is needed to sustain the operations. According to studies of applicant's books presented at the hearing by the company's treasurer, net revenue of $68,282 after provision for income taxes was earned in the year 1953 from operations under the present fares. The operating ratio after taxes was 91.9 per cent. An independent study of the accounting records for the 12-month period ended March 31, 1954, was introduced by a transportation engineer of the commission's staff. He developed that the operations during this more recent period under the present fares produced net revenue of $46,521 after provision for income taxes. The corresponding operating ratio was 94.13 per cent.

Estimates also were presented by the two witnesses showing the financial results of operation anticipated if the present fares were continued in the future 12-month period ending June 30, 1955, and also what the results would be if the increased fares sought by applicant in this proceeding were charged during that time. As summarized from the exhibits offered by the witnesses, the estimated results are shown in the tabulation which follows:

[1] The present fares were established under authority of Decision No. 46889 of March 25, 1952, 51 Cal PUC 551.

TABLE No. 1

Estimated Results of Operations under Present and Proposed Fares for 12-Month Period Ending June 30, 1955

	Applicant		Commission Engineer	
	Present Fares	Proposed Fares	Present Fares	Proposed Fares
Operating Revenues				
Passenger	$ 696,935	$ 820,725	$ 708,702	$ 837,247
Special Bus	21,200	21,200	24,350	24,350
Advertising	9,000	9,000	9,400	9,400
Other Revenue	300	300	850	850
Total Operating Revenues	$ 727,435	$ 851,225	$ 743,302	$ 871,847
Operating Expenses				
Equipment Maintenance and Garage Expense	$ 105,735	$ 105,735	$ 104,170	$ 104,170
Transportation	368,050	368,050	362,580	362,580
Traffic and Advertising	3,200	3,200	3,110	3,110
Insurance and Safety	59,520	59,520	48,060	48,060
Administrative and General	43,935	43,935	42,740	42,740
Depreciation	70,110	70,110	70,130	70,130
Operating Taxes and Licenses	67,480	70,305	60,497	62,303

Total Operating Expenses	$ 718,030	$ 720,855	$ 691,287	$ 693.093
Net before Income Taxes	9,405	130,370	52,015	178,754
Income Taxes[1]	2,545	63,905	21,657	89,994
Net after Income Taxes	$ 6,860	$ 66,465	$ 30,358	$ 88,760
Rate Base	$ 292,985	$ 292,985	$ 291,965	$ 291,965
Rate of Return	2.34%	22.69%	10.40%	30.4%
Operating Ratio after Taxes	99.1 %	92.2 %	95.9 %	89.8%
Bus Miles	1,728,680	1,728,680	1,721,000	1,721,000

[1] Federal income taxes were calculated on tax rates aggregating 52 per cent.

The principal differences in the foregoing estimated operating results are in the forecasts of the anticipated revenue and in the estimated cost of public liability and property damage insurance, in the franchise tax paid to the city of San Jose and in the additional expenses involved in an extension of one of applicant's routes. The revenue estimate of applicant's treasurer based upon the experience of past years was not substantiated. Instead, the staff engineer's higher estimate, which reflects reasonable adjustments of past experience for recent changes in traffic flow and distribution, will be used for the purpose of this decision.

In regard to the operating expenses, the public liability and property damage insurance premiums are paid on the basis of a percentage of the gross revenue subject to adjustment in accordance with the accident experience. The staff engineer's estimate reflects the average annual cost actually experienced and will be used in this matter. The city franchise tax, the record shows, normally is based upon 2 per cent of the gross revenue from all motor coach operations within San Jose. Evidence was introduced by applicant showing that the rate of tax was reduced by ordinance to one per cent for a one-year period ending October 13, 1954, and that thereafter the rate in question would revert to the specified basic rate of 2 per cent. However, the commission takes official notice of the adoption of Ordinance No. 4509, dated October 15, 1954, by the council of the city of San Jose, under which the franchise tax for applicant's operations within San Jose is being continued at the reduced rate of one per cent for a further period of one year. For the purpose of this decision, the franchise tax will be calculated accordingly.

Another difference in the expense estimates resulted from the added cost of rerouting and extending one of applicant's routes being provided for by the treasurer but not by the staff engineer. No estimate of the anticipated patronage was developed, however, and no provision therefor was made in the revenue figures. In seeking the authority for the route change in a separate proceeding, Application No. 35494, applicant alleged that the extension involved a distance of only nine-tenths of a mile and indicated that additional traffic was available. It appears that the revision of the route would cause but little, if any, change in the estimated operating results of record and need not be given effect in the absence of revenue estimates.

According to applicant's treasurer, if the proposed fares are granted the company is prepared to undertake a program costing about $6,000 per year designed to maintain its earning

position through stimulation of bus patronage. One of applicant's patrons suggested that it also consider offering to the public a weekly ticket without limitation as to the number of rides as a means of encouraging bus riding.

Service Matters

[1] A detailed study of the service being provided to the public by applicant was presented at the hearing by a transportation engineer of the commission's staff. The study included a comprehensive review of the frequency of the schedules operated each day and of the passenger loads on the buses at maximum load points. These data were developed for the various routes operated. The engineer concluded from his study that the schedule frequency was adequate for the present volume of traffic in the areas served and that the number of standees on the average during the peak periods was not excessive. In addition, he found that the buses were clean and generally in good mechanical condition.

The city manager of Santa Clara asserted that the service being provided by applicant was inadequate and that a survey should be made to determine the character and extent of the transportation requirements of the territory. He introduced evidence relative to the rapid growth of Santa Clara and of the scope of newly developed residential areas. In addition, a real estate broker and a representative of a builder engaged in residential development projects testified regarding the steady increase in the number of residences in the El Camino and Westwood tracts, respectively, situated in Santa Clara. They maintained that applicant should provide needed transportation service through extensions of certain of its routes into these tracts.[2]

Applicant's superintendent of transportation testified that the company had considered the matter of service to the areas in question about one year ago and had concluded that the prospective patronage was insufficient to warrant extension of the existing routes. The conclusion was based, he said, upon a survey made of the number of existing houses and of those under construction or being contemplated. The commission was furnished recently with a report of the further survey of the area which it was agreed at the hearing applicant would make. The survey covered a total of ten residential developments in Santa Clara and included a count of the number of occupied homes and those under construction and the number of automobiles in the areas.[3] The company

[2] Applicant filed Application No. 35884 on October 22, 1954, seeking a certificate of public convenience and necessity authorizing the extension of its route No. 7 into the Westwood tract area. In the circumstances, no action is necessary on the request for the service made herein.

[3] The company furnished the commission with a detailed report covering the El Camino, Junipero Gardens, Santa Clara Gardens, Scott Lane Gardens, Sunny Brae, West Claire, Mariposa Gardens, Westwood, Willow Crest, and Stevens Creek road residential tracts. In general, the report shows that Scott Lane Gardens, Mariposa Gardens, and West Claire tracts are in preliminary stages with many of the streets still unpaved. The latter two tracts are adjacent to applicant's existing route one. Most homes in Sunny Brae tract are from one-quarter to seven-tenths of a mile from route one. The Willow Crest tract largely is served by route 7. The Stevens Creek road area is served already by Peerless Stages and Palo Alto Transit. Junipero Gardens and Santa Clara Gardens assertedly are small tracts each having but one access road from the highway which present impracticable operating conditions. Assertedly, extension of existing routes at this time into the El Camino tract involves enlargement of loop routes which

has concluded from the facts contained in its detailed report that the sought service extensions are not practical nor warranted at this time and should be deferred until the areas in question are more fully developed. According to the report, "in practically every instance the streets leading into the areas are on the perimeters of the tracts with many of the streets within the tracts becoming dead-end streets because of intervening orchards and any extensions at this time would result in operating a large number of miles through unproductive territory." The report shows also that many of the homes are situated within one-quarter mile of applicant's existing routes or are located in territory already served by routes of either Peerless Stages, Palo Alto Transit, or Pacific Greyhound Lines.

When considered in the light of the company's detailed survey, the testimony of record relative to the need for service in newly developed residential areas does not afford an adequate basis for concluding on this record that the requested extensions are warranted under current conditions. The commission wishes to make clear that it is concerned with the maintenance of adequate service to the public. To warrant adoption, however, service proposals must be practical and be shown to have a reasonable chance of being sustained by the patronage. The present patrons should not be burdened with higher fares or suffer from service curtailments or impairments made necessary by premature or other nonsustaining extensions to newly developed areas.

Notices of the hearing in this proceeding were duly posted in applicant's vehicles and were published in newspapers of general circulation in the areas involved. In addition, the commission's secretary sent notices of the hearing to persons and organizations believed to be interested. No one specifically opposed the granting of the sought increases in fares.

Conclusions

[2] One of the significant conditions disclosed by the record in this proceeding is the decline in patronage of applicant's lines in recent years. In our opinion, continual advances in fares do not provide a reliable solution to applicant's revenue needs. We find the company's proposal to undertake a business promotion plan to stem the loss of patronage and to attract additional traffic to be in the public interest and we are including $6,000 in the adopted estimated operating results for this purpose. The company is expected to develop a suitable plan and to prosecute it vigorously. It will be required to render to the commission a detailed quarterly report of its business promotion activities.

Upon providing in the operating expenses for the cost of the aforesaid plan and for the San Jose franchise tax on the reduced basis, the results of operation anticipated for the test year under the present and proposed fares are summarized in Table No. 2 [Top of next page]:

would remove existing service from some areas and increase running times and discourage the existing patronage at the heavily populated intermediate points which would not be compensated for by the additional traffic which might be developed by the requested route extension.

TABLE No. 2

Adjusted Estimates of Operating Results under Present and Proposed Fares for 12-Month Period Ending June 30, 1955

	Present Fares	Proposed Fares
Revenues	$743,302	$871,847
Operating Expenses	697,287	699,093
Net before Income Taxes	$ 46,015	$172,754
Income Taxes[1]	18,425	86,765
Net after Income Taxes	$ 27,590	$ 85,989
Rate Base	$291,965	$291,965
Rate of Return	9.4%	29.5%
Operating Ratio after Income Taxes	96.3%	90.1%

[1] Federal income taxes based on rates aggregating 52 per cent.

[3, 4] The evidence of record is persuasive that the present fares would not provide a safe margin between the revenues and operating expenses during the rate year and that an upward adjustment of the present fares is needed. The increased fares sought by applicant, however, are higher than necessary or reasonable and would produce earnings that are not justified on this record. Needed additional revenue would be produced, however, by adopting in lieu of applicant's proposal an increase of the existing token rate of fare of 3 tokens for 25 cents to the level of 5 tokens for 45 cents with no changes being made in the existing adult cash fares nor in the 20-ride school fares. Under the fare structure as so adjusted, the estimated annual operating results would be as shown in Table No. 3. It should be pointed out that the reduced franchise tax on applicant's operations recently adopted by the San Jose city authorities makes it possible for the commission to hold the amount of the fare increase being authorized herein to a level lower than that otherwise necessary.

TABLE No. 3

Estimated Annual Operating Results under the Increased Fares Being Authorized Herein

Revenues	$771,571
Operating Expenses	697,684
Net before Income Taxes	$ 73,887
Income Taxes[1]	33,500
Net after Income Taxes	$ 40,387
Rate Base	$291,965
Rate of Return	13.8%
Operating Ratio after Income Taxes	94.8%

[1] Federal income taxes based on rates aggregating 52 per cent.

The seemingly high rate of return results from the fact that the depreciated rate base on which it is calculated now amounts to only 28.8 per cent of the original book cost of the properties devoted to the service. The record shows, however, that the operating equipment is in good condition and rendering satisfactory service. In the judgment and opinion of the commission, the rate of return resulting from the use of a rate base comprised mainly of substantially depreciated book cost of applicant's properties is unrealistic and distorted because of the fact that such cost does not reasonably represent the reasonable use value of the equipment. It is our opinion that if such value were provided for in the rate base the rate of return in the test year would approximate 9.7 per cent under the increased fares authorized herein. The commission is of the opinion and finds that this latter rate of return more appropriately indicates the actual situation existing than is portrayed by the rate of return calculated merely upon the depreciated book costs and that the op-

erating results under the increased fares authorized are reasonable under the circumstances involved in this proceeding.

As previously stated, the continuing rapid growth of residential areas in the San Jose-Santa Clara area is expected to require additional and improved transit service in the near future. The earnings anticipated from the authorized fares are needed to maintain applicant in position to discharge its service obligations to the public. The rate increase being authorized, however, should not be taken as a precedent. The situation existing is a particular one which requires special treatment. Ratepayers are not obligated to make capital contributions to a utility under the guise of a rate increase. However, the utility should be granted such rates as will afford it an opportunity to earn a reasonable return on its lawful investment.

The financial history of this applicant indicates that it has obtained a reasonable reward for the public service it has furnished in the past. However, excessive past earnings of a utility may not be recaptured by the imposition of confiscatory rates for the future nor may inadequate past earnings be compensated for by the authorization of excessive rates for the future. Nevertheless, it is the duty of a regulatory body to investigate carefully the financial history of a utility and to take into consideration its past earnings as one of several elements in arriving at a conclusion as to the proper rates which should be prescribed for the future. This rule is elementary. It is based both upon logic and the law.

San Jose City Lines, Inc., is a California corporation organized on or about December 23, 1909, originally being known as San Jose Railroads. At one time its outstanding stock and its first mortgage bonds were owned by Southern Pacific Company. On or about April 1, 1939, however, that company sold such stock and bonds, along with stock and bonds of San Jose and Santa Clara County Railroad Company (an inactive affiliated company), and those of certain other companies to Pacific City Lines, Inc., for a base consideration of $310,000 cash, plus the assumption of $324,000 of San Jose and Santa Clara County Railroad Company bonds then outstanding in the hands of the public. No allocation of the purchase price was made among the several property acquisitions. Subsequently, Pacific City Lines, Inc., transferred the stock of San Jose City Lines, Inc., to National City Lines, Inc. The bonds of San Jose City Lines, Inc., now in the amount of $895,000, came into the possession of San Jose and Santa Clara County Railroad Company.

The financial position of San Jose City Lines, Inc., as of March 31, 1954, as revealed by its balance sheet appearing in Exhibit No. 1, is as follows:

TABLE No. 4

Assets		
Current assets:		
Cash	$167,546	
Other current assets	48,948	
Total current assets		$216,494
Carrier operating property:		
Cost	$707,792	
Depreciation reserve	(414,232)	
Net carrier operating property		293,560
Intangible capital and deferred charges		11,175
		$521,229

Liabilities and Capital		
Current liabilities		$106,696
Equipment obligations		74,650
Bonds and capital:		
First mortgage bonds	$895,000	
Common stock	100,000	
Deficit	(655,117)	
Total bonds and capital		339,883
		$521,229

(Red figures)

Although applicant's balance sheet shows a deficit of $655,117, it is clear that this figure is not a true indication of applicant's earning experience under the present management. On April 1, 1939, applicant's accumulated deficit was $1,194,213. Between that date and March 31, 1954, a period of 15 years, applicant's net profits aggregated $598,596, of which $383,500 was distributed as dividends, and it realized book credits of $324,000 through the elimination of its liability with respect to the bonds of San Jose and Santa Clara County Railroad Company. These circumstances resulted in a reduction of the accumulated deficit from $1,194,213 to $655,-117. The amount of the improvement in the deficit position is $539,096.

A summary of the results of operations of San Jose City Lines, Inc., for the last five years from its annual reports is as follows:

TABLE No. 5

12 Mos. Ended Dec. 31	Revenue Passengers	Mileage Operated	Operating Revenues	Gross Income*	Capital Investment**	Return on Capital
1949	12,702,890	1,948,952	$834,392	$ 73,336	$491,661	14.9%
1950	11,532,968	1,906,975	761,825	56,134	453,843	12.3
1951	10,333,192	1,873,152	738,630	47,153	471,990	10.0
1952	9,350,417	1,857,619	825,265	105,162	523,467	20.0
1953	9,117,893	1,840,012	844,538	66,036	465,151	14.2

* Net carrier operating income less provision for income taxes.
** Includes long-term debt, capital stock and deficit at end of year.

Thus it clearly appears from a review of applicant's financial returns that the present ownership, since its acquisition of the property in 1939, has been successful in its operation of applicant's lines and has suffered no loss on its investment in San Jose. It has improved its equity position, it has withdrawn $383,500 in dividends, it has maintained and added to its equipment without additional investment other than earnings from operations, and it has developed a financial structure which includes cash and current assets of $216,494 as compared with liabilities, other than bonds, of $181,-346.

As previously indicated, applicant has taken the position after conducting a survey that extensions of routes into certain areas are not warranted at this time. Other evidence of record, as well as the survey, serves to demonstrate that the San Jose-Santa Clara area is experiencing unusually rapid growth and that substantial numbers of homes under construction in newly developed residential tracts near the existing routes will be completed in the near future. It shows also that further large scale construction activities are planned for other tracts in the area. Applicant is advised that it is expected to keep in close touch with these developments and to arrange on its own initiative for such additional

service as is reasonably required as soon as it appears that sufficient traffic might be available to cover the direct or out-of-pocket cost of the service.

Upon careful consideration of all of the facts and circumstances of record the commission is of the opinion and hereby finds that increased fares to the extent provided for in the order which follows are reasonable and justified and that in all other respects applicant's proposals have not been justified. In view of the fact that the fare adjustment herein authorized is predicated in part upon the bus mileage to be operated, applicant will be required to obtain the commission's approval before making any reductions in the service provided on its lines.

ORDER

Based upon the evidence of record and upon the conclusions and findings set forth in the preceding opinion,

It is hereby *ordered* that San Jose City Lines, Inc., be and it is hereby authorized, on not less than five days' notice to the commission and to the public, to increase the token rate of fare now provided in its Local Passenger Tariff No. 10, Cal. P.U.C. No. 10, to the level of five tokens for 45 cents with one token being accepted in lieu of 10 cents cash on one zone and two zone movements, and that no change shall be made in any of the other fares named in the said tariff.

It is hereby *further ordered* that the authority herein granted shall expire unless exercised within sixty days after the effective date of this order.

It is hereby *further ordered* that applicant be and it is hereby directed to develop and undertake an aggressive business promotion plan and to render a report to the commission at the end of each 3-month period after the effective date of this order showing detailed expenditures of the amount provided for the plan together with a brief description of the activities undertaken or programmed.

It is hereby *further ordered* that applicant shall not reduce or curtail any of the schedules or services on any of the routes as shown in its published timetable during the month of September, 1954, without first obtaining the approval of the commission.

It is hereby *further ordered* that in all other respects Application No. 35264 be and it is hereby denied.

It is hereby *further ordered* that applicant be and it is hereby directed to post and maintain in its vehicles a notice of the increased fares herein authorized. Such notice shall be posted not less than five days prior to the effective date of such fares and shall remain posted for a period of not less than thirty days.

CONNECTICUT PUBLIC UTILITIES COMMISSION

Board of Education of the Town of Andover

v.

Algonquin Gas Transmission Company

Docket No. 8961
December 21, 1954

COMPLAINT *by Board of Education against proximity of gas pipelines to school building; dismissed subject to conditions.*

Construction and equipment, § 2 — Commission authority — Improvements or alterations.

1. The commission has statutory authority to order such reasonable improvements, repairs, or alterations in the plant or equipment of a gas company, or changes in the manner of operation, that may be reasonably necessary in the public interest, p. 91.

Gas, § 5.1. — Safety regulations.

2. Before commission-adopted rules and regulations for the safe operation of gas plants and mains can be relaxed, there must be a clear and affirmative showing that circumstances in a particular instance distinguish it from the general rule, p. 91.

Gas, § 5.1 — Safety requirements — Location of mains.

3. A gas company was found to be in violation of commission rules and regulations governing the location of gas mains in relation to school buildings, despite the fact that the commission had fixed minimum standards necessary to give reasonable assurance that the manner of operation and method of construction would not endanger public safety after the mains were constructed, where the distance between mains and school buildings was less than the safety standards required, since the timing of the construction in relation to the establishment of the standards does not make the location of the mains any more safe or less safe and since the general statute in effect when the mains were constructed gave the commission authority to order reasonable improvements or alterations in the plant or equipment of a gas company, p. 91.

Gas, § 5.1 — Location of mains — Safety regulations.

4. A gas company was not required to change the location of a gas main which, as a high pressure main, would violate commission-established standards regarding the proximity of such mains to school buildings, where the main as presently used was not actually a high pressure main and where, so long as its use continued as in the past, the main was not unsafe, while strict adherence to the regulation would require reconstruction which would greatly inconvenience thousands of gas consumers in the area, p. 92.

By the COMMISSION: By a petition filed on August 14, 1953, by the selectmen of the town of Andover for and on behalf of the board of Education of the town of Andover, a complaint was registered regarding the proximity to the Andover Elementary School of the high pressure natural gas pipeline of the Algonquin Gas Transmission Company, a natural gas pipeline within the meaning of Chap 264-a, General Statutes, 1953 Supplement.

The matter was assigned for a public hearing to be held at the office of the commission in Hartford on March 1, 1954. Upon petition of residents of the town of Andover, the place of the hearing was changed from the office of the commission in Hartford to the town hall in Andover. Notice of the hearing on the complaint and of the reassignment of the place of the hearing was given to the board of education of Andover, to the town of Andover, to the Algonquin Gas Transmission Company, and to such other persons as in the opinion of the commission appeared to have an interest in the matter, all of which more fully appears from the commission's order of notice and return of its secretary thereon, on file. At the time and place of the hearing the board of education appeared by the town counsel of Andover and the Algonquin Gas Transmission Company appeared by counsel.

The Algonquin Gas Transmission Company constructed a pipeline for the transmission of natural gas in the town of Andover, beginning the construction on or about August 30, 1951, and completing the same on October 8, 1951. This is the company's main transmission line and extends from Lambertville, New Jersey to a point near Boston, Massachusetts. In Connecticut, the line is of 26-inch diameter west of the Connecticut river and 24-inch east of the Connecticut river. It supplies gas to communities in Connecticut, Rhode Island, and Massachusetts.

The Andover elementary school is located on Lakeside Drive in that town and consists of two buildings, the original of which was completed in 1948 and the addition or annex, so-called, completed in the fall of 1953. A playground for children attending the school is located to the rear and north of the buildings.

The pipeline was constructed in accordance with the American Standard Code for Pressure Piping B 31.1–1951 of the American Standards Association for a maximum allowable working pressure of 750 p.s.i.g. (pounds per square inch, gauge) and has been in operation since September of 1953. All the pipeline adjacent to the school was designed and constructed under Division 2 of § 2 of the Standard Code for this working pressure. Its nearest point to the playground is 230 feet northwest therefrom and its nearest point to the original building is 412 feet and from the annex 440 feet northwest.

Following extensive investigation and public hearings, the commission issued its High Pressure Gas Transmission Pipelines—Rules, Regulations, and Construction Standards, hereinafter referred to as the Rules and Regulations which were partly effective on February 27, 1952, partly on March 14, 1952, and the balance on December 8, 1952. Rule 3 of Part I titled "Permission Required," in effect February 27, 1952, provides in

part as follows: "A section of gas pipeline may be constructed under Division 2 of § 2 of the Standard Code if permission of the commission is first obtained; provided that the provisions of Division 1 of § 2 of the Standard Code shall apply to such sections which, at the time of construction, are within the limits of a city or borough or within 500 feet of any of the following . . . any school building, playground, or buildings devoted to institutional uses . . . ."

We, therefore, have presented before us for consideration a natural gas pipeline which was built prior to the effective date of a specific rule which imposed a limitation of 500 feet from a school or playground within which no pipeline of Division 2 specifications could be constructed but which is, in fact, considerably closer than 500 feet to a playground area and a school.

[1] The commission received its authority to regulate high pressure natural gas pipelines by virtue of § 1969c General Statutes 1953 Supplement. By the provisions of § 5401 of the General Statutes, Revision of 1949, the commission may order "such reasonable improvements, repairs, or alterations in such plant or equipment, or changes in the manner of operation, as may be reasonably necessary in the public interest." The petitioner contends that because of this latter provision Algonquin constructed its line as presently located with full knowledge that the commission had power to adopt rules and regulations concerning the installation thereof and further had power in the future to order repairs, alteration in the plant or equipment, or changes in the manner of operation as the public safety might require. It is the contention of the complainant, therefore, that the location of the line within less than 500 feet of the playground and school was accomplished by Algonquin at their peril and now that the 500-foot standard of safety has been determined and the rule thereon formally promulgated, the company must adhere to the letter of the provisions of that rule and relocate the line so that it will comply with the 500-foot limitation or otherwise conform to the commission's regulations.

On the other hand, it is the company's contention that no hazard, in fact, exists at the present time, that there is no danger to the general public because the line was constructed without contravention of any statute or rule, and that, therefore, a defect in the line itself or a danger to public safety must be shown affirmatively to justify an order of relocation by the commission.

[2] The commission Rules and Regulations were prescribed after lengthy investigation, utilizing the assistance of experienced and objective engineers. They were the subject of extensive public hearings with an opportunity to all interested parties to make their positions known. The standards there set out were admittedly general but constituted the minimum requirements which we felt assured safety of construction and operation. Before these rules can be relaxed, there must be a clear and affirmative showing that circumstances in the particular instance distinguish it from the general rule.

[3] Our statute gives us jurisdiction only where the manner of operation is such that the public safety or

the health and safety of employees are in danger. (Section 1970c, 1953 Supp.) To implement this broad grant, the standards contained in our Rules and Regulations were promulgated. (See Order in Docket No. 8612, February 1, 1952.) We there fixed the minimum standards necessary to give reasonable assurance that the manner of operation and method of construction would not endanger the public safety or the health and safety of employees. That these were more strict than the company had complied with is, of course, no fault of this commission. Safety standards are to a degree objective. They do not vary with time or place. If a given situation or method of construction is unsafe, it remains so wherever and whenever that identical combination of circumstances occurs. The accident that the line was constructed before the rules became effective in no way affects whether the line was constructed in a safe manner. The obligation was on the company to construct its line in such a manner that the public safety and the health and safety of its employees were protected. This standard was contained in legislation enacted by the general assembly prior to the construction of the line. It is to this standard that the commission necessarily relates any particular method of construction or manner of operation. The promulgation of this commission's Rules and Regulations was merely the implementation of the statutory mandate. The Rules and Regulations may have served to focus the necessarily blurred outline of the statutory standard but by no means did they create the standard itself. The company's claim is thus without substance, that it was within the law when it constructed the line or that the standards to which the line is now compared were not effective at the time of construction.

The company appears to concede that the construction violates our Rules and Regulations and that if it were begun after they were promulgated it would not have been carried out in the same manner. This impression is reinforced by the manner in which subsequent construction was completed. There was no objection from Algonquin at the time the rules were prescribed, nor attempt to secure judicial review of the Rules and Regulations on the basis they were unreasonable or exceeded our statutory authority. Algonquin was a party to hearings and was afforded ample and repeated opportunities to make its opinion on the rules known to the commission. We fail to be impressed, therefore, with the argument that the line was safe when it was built. It was as unsafe then as it is now unless operated at a pressure which assures that the construction will be within the minima for Division 1 construction.

[4] The transmission pipe in question is 24 inches outside diameter having .250 inches wall thickness. This size pipe used by Algonquin is manufactured by either the Claymont Steel Corporation or A. O. Smith Corporation and its specifications indicate that for Division 1 classification, pipe of this specification, size, and wall thickness, has a maximum allowable working pressure of 558 p.s.i.g. rounded, and the commission's calculations indicate a maximum allowable working pressure of 543 p.s.i.g. rounded. Pressures in excess of these values

would place this pipe in Division 2 category. Thus, as long as maximum working pressure remains below 543 p.s.i.g., the line will not violate commission rules and regulations and, therefore, will not constitute a danger to the public safety.

At the request of the commission, the company submitted a statement of maximum pressures carried in the line for each month from September, 1953, (the date the line was first put into operation) through October of 1954. At no time during that period has the maximum pressure in this pipe exceeded the maximum allowable working pressure for Division 1 pipe as calculated by the commission. As a matter of fact, in all but two months the pressure has been well under 500 pounds. It is apparent, therefore, that the pressures to which this pipe is presently subjected classifies it well within the limits of the specifications for Division 1 pipe and, therefore, may be placed no closer than 40 feet from a building, as prescribed in the commission's Rules and Regulations.

Since the line was built for a maximum allowable working pressure of 750 p.s.i.g., however, its method of construction must conform to the limits required for such a maximum pressure, unless the company sees fit to reduce it. Until it does so or until it otherwise conforms its construction to our Rules and Regulations, the line clearly is in violation of the minimum standards promulgated by this commission.

Bearing in mind, however, the practicalities involved in a reconstruction project which would necessarily affect many thousands of gas consumers throughout New England, including the cities of Providence and Boston, our order below will be drafted to give recognition to the fact that under present pressures the line is not as a matter of fact unsafe.

We find, therefore, that when pressure exceeds 543 p.s.i.g. the line will be operated in violation of our Rules, Regulations and Construction Standards because of its proximity to the Andover Elementary School and as such will be operated in a manner which endangers the public safety and that, therefore, pursuant to the provisions of § 1971c, General Statutes, 1953 Supplement, an order should issue requiring the company to conform its construction to the standards set forth in the Rules and Regulations referred to hereinabove as soon as it becomes apparent that working pressure will exceed 543 p.s.i.g.

Our order below provides that the company will notify the commission monthly, as promptly as the information becomes available, of the maximum working pressure experienced on the line in the preceding monthly period.

ORDER

It appearing, that by a petition filed August 14, 1953, the Selectman of the Town of Andover, for and on behalf of the board of education of the town of Andover, complains of the proximity to the Andover Elementary School of the high pressure natural gas transmission pipeline of the Algonquin Gas Transmission Company, and,

It appearing further, that the matters and things contained in the said complaint were the subject of investigation and public hearing and that

the commission has made its findings of fact and conclusions of law which are hereby made a part hereof,

Now, therefore, it is *ordered,* that the company maintain monthly records of the maximum working pressure on its line in Connecticut, which information will be transmitted to this commission as promptly as the information becomes available, and,

It is *ordered further,* that when it becomes apparent, in the opinion of the commission, based on, among other things, the information submitted by the company of its maximum working pressure, that the line will be operated at pressures exceeding 543 p.s.i.g., the company will make the necessary modifications in its location or method of construction, or alter the method of operation so that the line will conform to the rules and regulations of this commission promulgated in High Pressure Gas Transmission Pipe Lines Rules, Regulations, and Construction Standards, Docket No. 8612, effective February 27, 1952, except as otherwise noted therein, more particularly, but not exclusively, to Rule 3, Part I, and, It is *ordered further,* that this proceeding be, and it hereby is, dismissed, and,

It is *further ordered,* that notice of the foregoing be given by the secretary of this commission by forwarding true and correct copies of this document to parties in interest, and due return make.

Re Public Service Electric & Gas Company

Docket No. 8309
January 12, 1955

APPLICATION *by combined gas and electric company for approval of sale of certain property; denied.*

Consolidation, merger, and sale, § 20 — Approval of property sale — Purchase price.

The sale and conveyance of certain property of a combined gas and electric company will not be approved, even though the sale would not adversely affect the company's ability to furnish safe, adequate, and proper service, where the company could have sold the property for a higher price.

APPEARANCES: Winslow B. Ingham, for Public Service Electric and Gas Company; Barnett D. Singer, for Barnett D. Singer and Burton V. Singer; Daniel Feinberg, for Temple Beth Am; Robert M. Wolf, for George J. Wolf Realty Co., Nat Siegal, and Sam Frank; Benedict W. Harrington, Deputy Attorney General, for the Board of Public Utility Commissioners.

By the COMMISSION: Public Service Electric and Gas Company, by application dated September 23, 1954, applied to the board of public utility commissioners for approval of the sale and conveyance of certain property described in the petition, to Barnett D. Singer and Burton V. Singer for the sum of $66,000.

The record shows that the property was originally acquired on November 1, 1899, by the Hudson County Gas Company, the predecessor of Public Service Electric and Gas Company, and was used for a gas holder and for distribution shop purposes up to and including the month of June, 1954, when the gas holder was taken out of service and the distribution shop was combined with facilities at Jersey City.

Before the board of directors of the Public Service Electric and Gas Company had an opportunity to consider the feasibility of selling the property, many inquiries were made of the company's real estate department in an attempt to ascertain the probable asking price, and offers ranging from $20,000 to $32,000 were made between April 26, 1954, and June 18, 1954. On June 21, 1954, Barnett D. Singer advised the company that he was prepared to offer $50,000 for the property. Mr. Fred Schafer, real estate agent for the company, advised that he considered this a fair offer and would recommend to the board of directors that it be sold for that amount. On June 22, 1954, the company advised the interested parties that the

asking price for the property was $65,500.

Before Barnett D. Singer was able to deliver a written offer for $50,000, the real estate agent of the company was advised by George J. Wolf Realty Co. that they were prepared to make an offer of $57,500 for the property. This information was conveyed to Mr. Singer, who made an offer of $60,000.

In compliance with the board's Conference Order No. 23, the company advertised for bids in the Bayonne Times on July 3, 1954. The following bids were received in answer to the advertisement:

$30,000 by Max Steinert
$41,500 by Nathan Susskind
$48,000 by S. Turtaltaub Sons
$62,000 by George J. Wolf Realty Co.
$62,500 by Temple Beth Am

The Singers did not submit a bid. Apparently they rested upon the offer of $60,000, previously made by them. This offer was less than the highest bid of $62,500 made in answer to the advertised request for bids.

Thereafter the company advised Barnett D. Singer that it had received bids in excess of his original offer of $60,000, and he submitted a bid in the sum of $66,000. The company then advised all bidders that their bids had been rejected and entered into an agreement to convey the property for $66,000 to Barnett D. Singer and Burton V. Singer, subject to the approval of the board of public utility commissioners.

There was opposition to the company's application by Temple Beth Am and the George J. Wolf Realty Co. on the ground that they would be willing to meet or beat the offer of $66,000 made by the Singers.

Revised Stats 48:3–7 requires the approval of this board to any sale of property by a utility company. This statute was designed to prevent a sale from being made which, in the judgment of the board, would be inimical to the interest of the state and its citizens. The citizens of the state include both the consumers of the company and its stockholders.

After consideration of the record in the proceedings, the board finds that the sale and conveyance of the land in question would not adversely affect the ability of the applicant to furnish safe, adequate, and proper service, but the record is replete with evidence that the company did not receive the highest or best consideration that could be obtained for this property.

The Board, therefore, denies its approval of the sale and conveyance of the land described in the petition.

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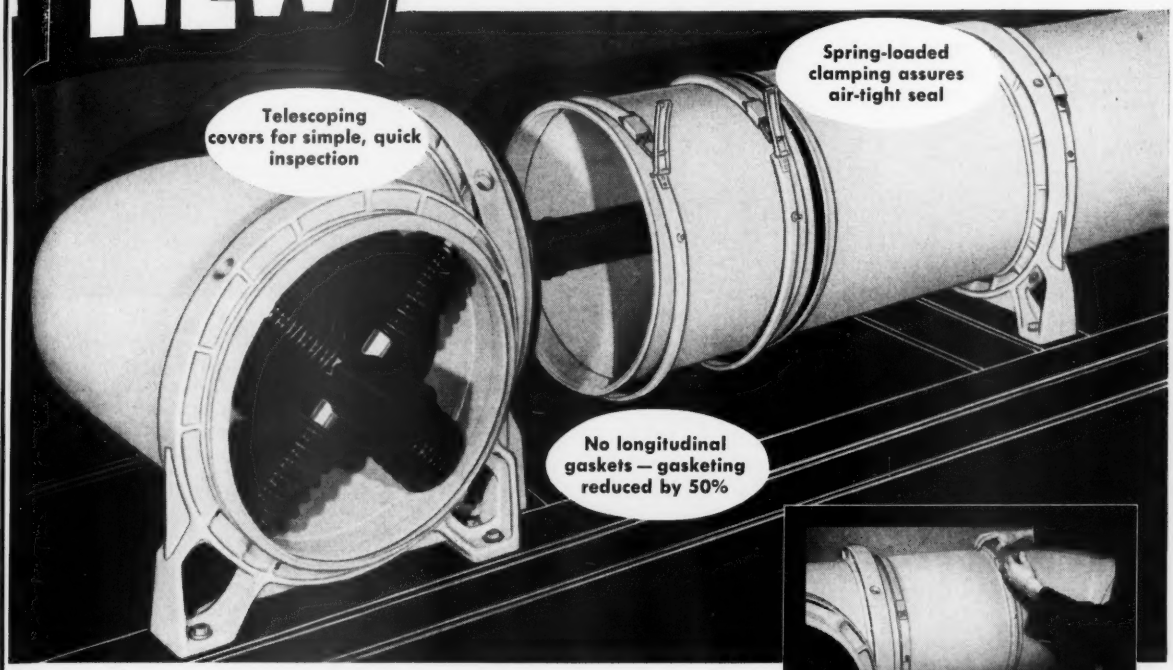
Telescoping covers for simple, quick inspection
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Metal enclosed isolated phase bus structures with telescoping covers

Here's Delta-Star's new engineering achievement in metal enclosed bus structures! New design permits easy, economical installation. New telescoping covers save time and money on inspection and maintenance.

Installation is simplified by eliminating all bolted covers. Instead, telescoping covers are clamped in position and locked with two screws. Longitudinal sections 6 to 8 ft. long can be pre-assembled and shipped in lengths as large as your facilities can handle. Pre-assembled conductor joints are pre-welded. Corners and tees are shipped *complete* with bus and insulators. *There are no longitudinal gaskets to cut and install.*

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For complete information, talk to your Delta-Star representative. Or, write for Bulletin B.

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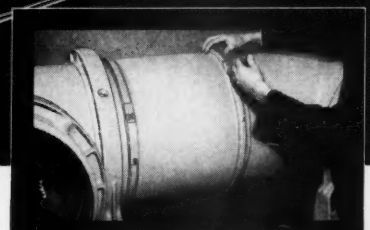
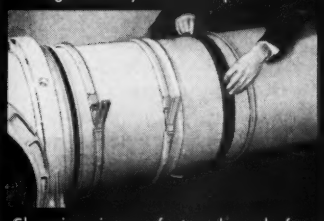


Bus structure sealed, with clamping rings securely locked in position.



Clamping rings unfastened, ready for telescoping cover to be moved.

Cover slid back, open for bus inspection. Opening accomplished in 30 seconds!

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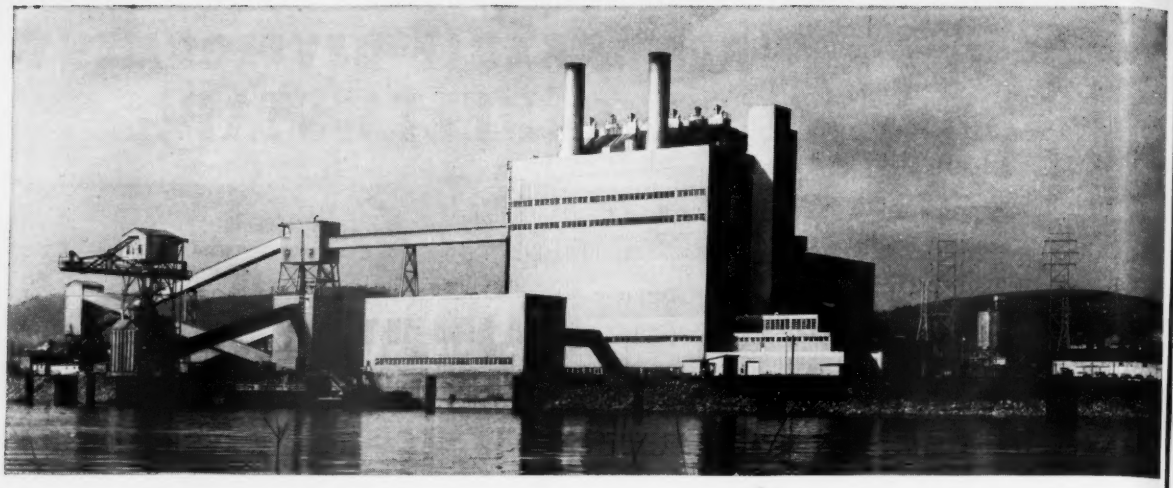
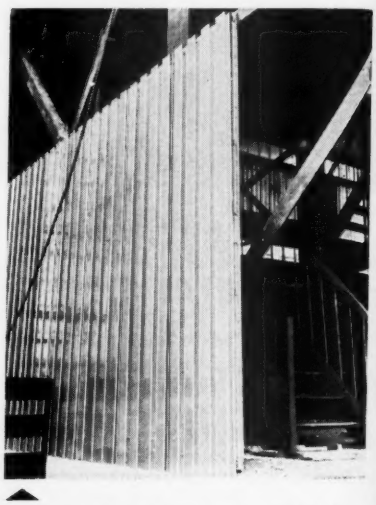


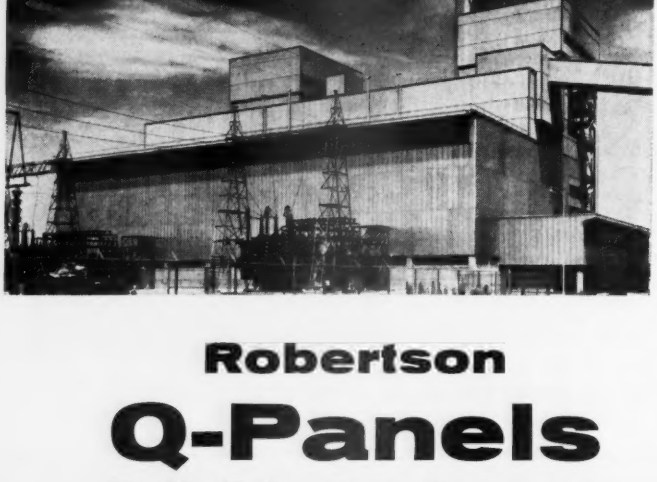
Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.

Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

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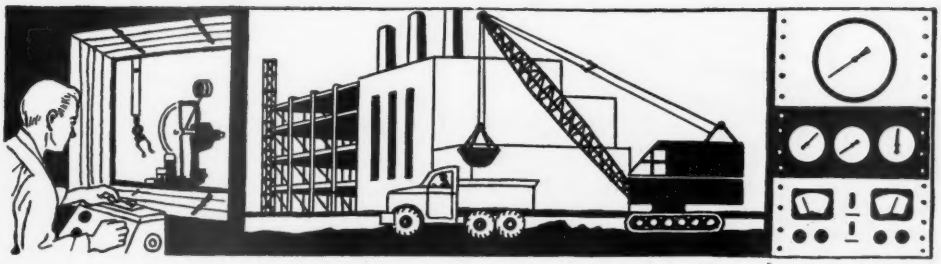


Industrial Progress

$22,000,000 Program Planned By Boston Edison

BOSTON Edison Company's expenditures for new production, transmission and distribution facilities in 1955 will be approximately $22,000,000, as compared with $19,256,985 spent in 1954, according to Thomas G. Dignan, president. At Mystic station in Everett, foundation work is under way for the company's new generating unit, which will have a capability of 140,000 kilowatts, and which will be the largest unit in New England when completed. Anticipating load growth in the Brighton-Newton-Watertown area, the company is building a new transmission station in Brighton, and an underground 110,000-volt connection with Mystic station, both of which will be completed this year.

Highway Trailer Dealers Meet

REPRESENTATIVES from coast to coast who distribute Highway Trailer Company's line of public utility equipment assembled at Edgerton, Wisconsin, for a two-day sales and service conference held on February 22 and 23.

A conducted tour through the main plant and inspection of earth boring machines and utility trailer models, including special displays of operative assemblies, opened the program.

A major portion of the meeting was devoted to a product review of the firm's complete line of utility truck bodies, earth boring machines, pole and cable reel trailers and associated equipment by R. E. Hull, utility sales manager. Informative discussion on repair and maintenance of the mechanical goods items was of particular interest to the service personnel in attendance. Presentation of new engineering design features and developments was made by H. C. Stricker, Jr., chief engineer and George Connors, design engineer.

A highlight of the conference was the field demonstration of Highway's newly developed Swing Base Earth Boring Machine which allows the operator to rotate the earth boring machine 180 degrees and dig at any point within this arc. The machine will also move forward and aft 22 inches.

AGE Expects to Quadruple 1955 Demand by 1975

IN the two-year period 1953-54, American Gas and Electric Company added 1,075,000 kilowatts of generating capacity, including 430,000 kw in 1954. This is the largest block of capacity added by a private utility system in a similar interval in history, according to Philip Sporn, president.

A prediction by Mr. Sporn that the AGE System will experience a peak demand of 3,550,000 kw in 1955, four times that of the 1939 peak, was coupled with the further projection that the demand likely will quadruple again within the relatively short period of 20 years. He said that the 1975 projection was based on the "background of growth experience up to the present and with an appreciation of the fundamental developments in the nation's economy and in the economy of the area served by the System from every basic viewpoint."

Westinghouse Names New Utility Eecutive for Northeastern Region

PAUL B. Shiring, formerly sales executive for Westinghouse at Buffalo, N. Y., has been named electric utility manager for the Northeastern region, Westinghouse Electric Corporation, headquartered in New York city.

In his new post, Mr. Shiring will have charge of the sale of apparatus for the generation, transmission and distribution of electric power to electric utility organizations throughout an area comprising all of New England, New York state, part of northern Pennsylvania and the northern half of New Jersey. He succeeds C. Spence Purnell, who has been transferred to Los Angeles, California, as manager of the South Pacific district for Westinghouse.

Kerite Names L. W. Eighmy, Jr. Power Department Manager

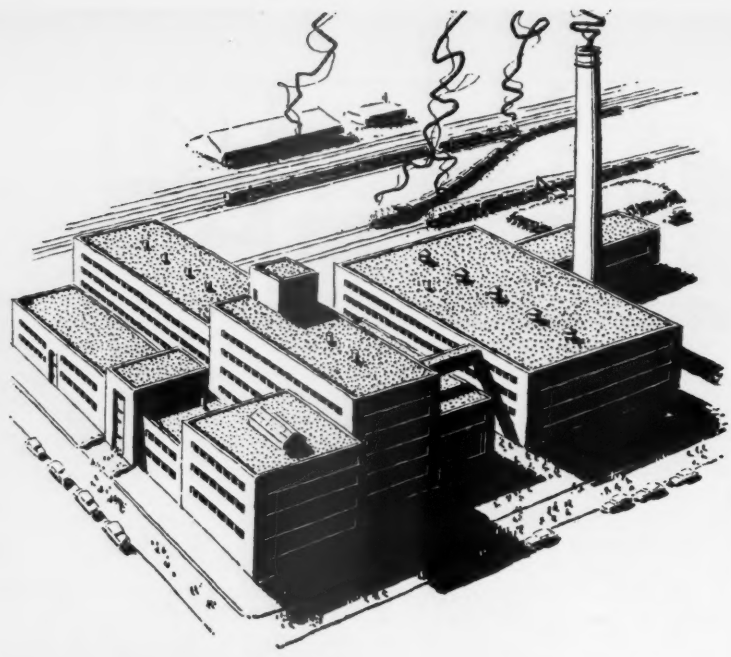
THE Kerite Company, manufacturer of insulated wire and cable, announces the promotion of L. W. Eighmy, Jr., to manager of its Power Department. He will be in charge of sales and engineering for industrial and power customers throughout the country.

Mr. Eighmy joined Kerite's sales division in 1936, and represented the company with power and industrial concerns in New York state, Ohio, and the Detroit area. From 1950 until his present appointment, he served as assistant manager of power sales in the East. From 1933 to 1936, he worked for Buffalo Niagara Electric Corporation, now Niagara Mohawk Power Corporation.

Transcontinental Gas Pipe Line Expansion to Cost $83,000,000

TOM P. Walker, president of Transcontinental Gas Pipe Line Corporation, announced recently that the company will proceed immediately with an $83,000,000 unified construction program, as a result of the latest Federal Power Commission order approving its plans for expansion. This

(*Continued on page* 28)



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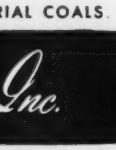
Written by Joseph Harrington of Southern's engineering staff—noted authority on Coal; its chemistry, preparation, and utilization storing and handling.



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INDUSTRIAL PROGRESS (*Continued*)

will enable the company to boost its daily allocated capacity from 565 to 695 million cubic feet of natural gas and its peak day allocated capacity to 831 million cubic feet, including deliveries from storage.

The expansion program will involve 23 separate construction projects in 11 states along the line from Texas to New York. Work on all of these will proceed simultaneously, with completion scheduled for the 1955-56 heating season.

Forty-eight public utility, industrial and municipal customers of Transcontinental will receive increases in their allocations when the expanded facilities are placed in operation. Altogether they will receive an additional 130 million cubic feet of daily allocated capacity.

$28,000,000 Spent by Union Elec. of Missouri in 1954

UNION Electric Company of Missouri made construction expenditures in 1954 totaling more than $28,000,000. Included in those expenditures were over $4,000,000 for completion of the second generating unit at the Meramec plant, $1,219,000 for other power plant facilities, nearly $2,000,000 for transmission facilities, $17,319,000 for distribution facilities and $3,535,000 for other items.

Power-Line Carrier Booklet Available from Westinghouse

THE complete line of Westinghouse power-line carrier equipment (Type FD) for voice communications is described in a new 24-page booklet available from the Westinghouse Electric Corporation.

Some features of Type FD equipment described are improved receiver selectivity, operation from station batteries, filament current regulation, and accessibility of assemblies.

Use of carrier for manual simplex, duplex and automatic simplex voice communications is discussed.

For a copy of this descriptive bulletin, 84-400, write Westinghouse Electric Corporation, P. O. Box 2099, Pittsburgh 30, Pa.

Illinois Bell Raises Building Plans for 1955

ILLINOIS Bell Telephone Company has revised its 1955 construction program upward to $113,000,000 from the $108,000,000 announced earlier, according to William V. Kahler, president.

(*Continued on page* 30)

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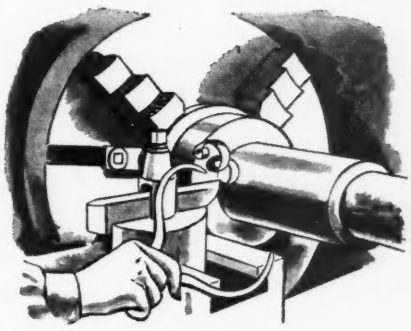
YOUR Special Advantage for APRIL!

. . . . this is the SPECIAL ADVANTAGE STICKER which dozens of companies are using this month on the front cover of Electrified Industry. →



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Customers are reminded of you and of the SPECIAL ADVANTAGES of being on your lines. In addition your stickers help them route your messages to additional readers.

Some companies make up stickers which carry their own slogan (a good idea). Others have Reddy Kilowatt remind the readers that electric power is their willing servant.

Power salesmen make friends for your companies and add to your "net divisable." Years ago they decided that they needed help to overcome the effects of the competitive power, diesel-and-steam, agin-the-utilities magazines that they saw on their customers desks. They helped create the picture magazine which tells the true story that electricity, properly used, is worth many times its cost.

They use this magazine to make 21¢ calls for them in between the $5 and $10 calls they make in person.

By using Electrified Industry they are able to maintain better-than-ever customer contact and increase the net revenue of the utilities.

ELECTRIFIED INDUSTRY and ***Today's Business***

Martin Publications – 20 No. Wacker Dr., Chicago 6

More people want home telephone service than the company estimated earlier this year, said Mr. Kahler. Demand for service has lengthened waiting lists in some areas because of a shortage of central office equipment and cable.

Blaw-Knox Names R. A. Troman Sales Manager, Tower Dept.

ROBERT A. Troman has been promoted to sales manager of the Tower Department, Equipment Division of the Blaw-Know Company, Pittsburgh. He replaces A. H. Jackson, former sales manager for towers, who was recently promoted to manager of Engineering & Development.

Blaw-Knox Company has been manufacturing towers for more than 30 years for radio and power transmission use, and more recently television, microwave and radar installations.

Mr. Troman joined Blaw-Knox in 1925 as an engineer in the Tower Department. Prior to his promotion, he was assistant sales manager.

$16,200,000 Construction Budget Set By Peninsular Telephone

A NEW construction budget of $16,200,000 was approved by directors of the Peninsular Telephone Company. This is 28 per cent above last year's budget which had been the all-time high in construction expenditures until this time.

The rapid growth and expansion of Florida's central West coast area served by Peninsular and a consequent increase in telephones were cited as reasons for this record-breaking expenditure.

Worthington Merges Wellsville Works and Steam Turbine Sales

THE Wellsville Works and Steam Turbine Sales Division of Worthington Corporation are being merged and will be known as the Steam Turbine Division, according to an announcement by Walther H. Feldmann, executive vice president.

Arthur F. Reinking, manager of the steam turbine sales division for the past four years, has been appointed general manager of the new steam turbine division, with full responsibility for the operation of all departments. Paul R. Darling has been appointed manager of Steam Turbine Sales, having represented the Steam Turbine Sales Division in Worthington's Chicago Office. L. E. Hammer will continue as manager of Manufacturing.

New Pengo Underground Duct Rodding Machine

THE PENGO Series 600 Duct Rodding Machine is now in production by Petersen Engineering Company, Santa Clara, California. The manufacturer states that this is an improved machine for rodding underground power or telephone ducts or pipes of any kind, and is capable of rodding ducts to a distance of more than 1000 feet which is substantially greater than any machine now on the market.

Proved in a test operation by a leading utility firm, one machine is claimed to have saved $30,000 over previous methods, in one year.

This ingenious patented equipment causes the rod to revolve clock-wise in the duct as it pays out, returns or holds the rod steady without shifting gears or stopping.

Literature available from Petersen Engineering Company, Manufacturers, Santa Clara, California.

Roy Olson Named Engineering Director for Motorola Communications

ROY H. Olson has been appointed director of engineering in the Communications & Electronics Division of Motorola, Inc. In this capacity he will direct the technical activity of the di-

(*Continued on page 32*)

A NEW REPORT... WASHINGTON WATER POWER COMPANY

COMMON STOCK

A clear, comprehensive study appraising the common stock of the Washington Water Power Company in the light of recent developments is contained in our new 22 page booklet. You will see why the company's greatly improved power supply position enhances its already favorable potential for increased earnings and dividend income. An unusual feature of the common stock which increases its attractiveness is that a portion of the dividend is tax-free.

For a copy of the report on this unusual Northwestern utility situation, just mail the coupon below. There is no obligation.

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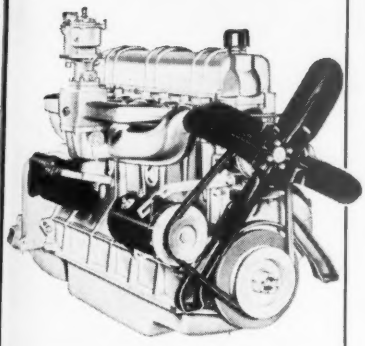
New R-1700 Series models operate with less downshifting, less lugging — reduce driver effort, increase operating economy. Four-speed transmission standard. Optional 5-speed direct-in-fifth or 5-speed overdrive available. R-1700 Series GVW ratings, 16,000-20,000 lbs. GCW rating, 35,000 lbs.



All-new 140-hp Black Diamond 264 engine combines famous INTERNATIONAL long life with new, economical sustained-power performance. Has new dual-barrel carburetor, new manifolding, 7.0-1 compression ratio — new low-friction design with 3-ring controlled-expansion pistons — new 50° ramp camshaft for longer valve life — new solenoid-type over-running clutch starter — new 11-inch clutch with 15% more lining area, 25% less pedal pressure. Maximum engine torque: 234 lb-ft at 2000 rpm.

NEW R-1700 Series

With an engine that tops 'em all for efficiency — the all-new 140-hp INTERNATIONAL Black Diamond 264!

New models and new features keep coming from INTERNATIONAL all the time! Here now are 1955's first — the R-1700 Series, designed by the leader in the 16,001-19,500 GVW range to bring new hauling profits to every operator using trucks in this class.

These brilliant new R-1700 Series trucks far surpass all former INTERNATIONAL leaders in this GVW classification. And they are powered by an engine that puts out more horsepower per cubic inch than any comparable 6-cylinder truck engine on the road!

Visit your INTERNATIONAL Dealer or Branch and get full facts on these money-saving, money-making new INTERNATIONALS. You'll quickly see why — in performance, economy, efficiency — they outrank anything in the 16,001-19,500 GVW class.

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"Standard of the Highway"

Saves 6 men, 4 tampers, 2 compressors and small dozer with one-man-operated "80-W"

VAN DOREN BROTHERS of Richmond, Virginia recently backfilled and compacted approximately two miles of trench, 2 feet wide and 4 feet deep, for a 6-inch gas line with just one man and one machine, a Cleveland "80-W" backfiller.

Before the Van Dorens purchased their "80-W" they used 7 men, a rubber-tired dozer, 2 compressors and 4 air-driven tampers for backfilling and compacting on jobs of similar size and type. The one-man-operated "80-W" did the complete job in less time than the 7-man crew formerly required on comparable jobs. "It's a great time saver," was F. M. Van Doren's comment on its performance.

On a previous job their Cleveland backfiller had saved them considerable time and money on a 12-inch water line trench, averaging approximately 6 feet deep, by its unique ability to backfill spoil deposited on a down slope on the far side of the trench, while simultaneously tamping it to the state of Virginia's rigid compaction specifications.

The "80-W" also does an outstanding job of side-crane work, lays pipe, pulls crossings, sets hydrants and valves, pulls sheathing, loads and unloads pipe, etc. Despite its ability to perform all these operations—and do an outstanding job on *each* of them—the "80-W" is easy to operate. The Van Dorens' operator learned to operate it with high efficiency after only two days training on the job.

Investigate this remarkable time, labor and machinery saving tool now—so that you, too, can realize its outstanding benefits on your next job

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CLEVELAND

INDUSTRIAL PROGRESS
(Continued)

vision's industrial products department.

Daniel E. Noble, Division vice president, announced the promotion which places Mr. Olson in charge of engineering co-ordination for industrial products and non-military research and development efforts.

$65,000,000 Program Planned by New York State Elec. & Gas

EXPENDITURES for construction in 1954 by New York State Electric & Gas Corporation were $29,700,000. Although no new electric generating facilities were placed in service during the year, construction of the new Milliken electric steam generating station near Ithaca and related transmission facilities proceeded on schedule for completion in the fall of 1955.

Additions and improvements to property accomplished in the nine years ending in 1954 total $192,900,000. Estimated requirements for 1955 through 1957 are $65,000,000 of which $28,000,000 is to be expended in 1955. The projected program is $23,700,000 less than for the 3 years ended in 1954.

Ebasco Services Handling Project For Portland General Electric

EBASCO Services Incorporated, the engineering, construction and business consulting firm, announces that it is designing and supervising the construction of an earth-fill dam 700 feet long and 100 feet high, near Mt. Hood, Oregon, for Portland General Electric Company.

Located in Mt. Hood National Forest, the Timothy Meadows project is expected to be completed next fall. It is estimated that the cost of the dam and reservoir will be in excess of $2,500,000.

The dam will form a lake 1½ miles wide at its widest point and 3½ miles long, providing 60,000 acre feet of water storage. This storage will supplement existing reservoirs of the Oak Grove project and will make it possible to store water for release during low flow periods, thereby increasing the generating output of three of the company's down-stream power plants.

$8,000,000 Construction Budget Set By Montana-Dakota Utilities

MONTANA - DAKOTA Utilities Company reports that gross plant additions in 1954 totaled $11,182,706, with electric additions amounting to $6,440,281, gas additions $4,473,540

(Continued on page 34)

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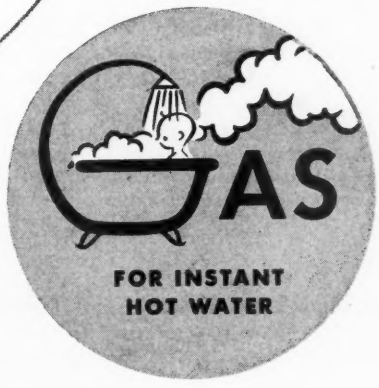

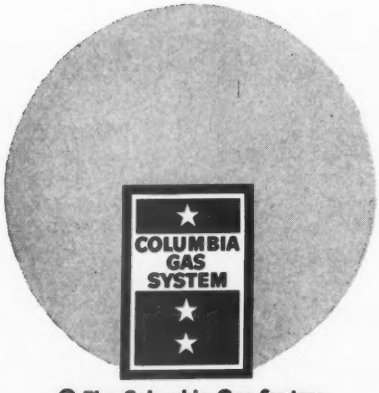

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CHARLESTON GROUP: United Fuel Gas Company, Atlantic Seaboard Corporation, Amere Gas Utilities Company, Virginia Gas Distribution Corporation, Big Marsh Oil Company, Central Kentucky Natural Gas Company; **COLUMBUS GROUP:** The Ohio Fuel Gas Company; **PITTSBURGH GROUP:** The Manufacturers Light and Heat Company, Binghamton Gas Works, Cumberland and Allegheny Gas Company, Home Gas Company, The Keystone Gas Company, Inc., Natural Gas Company of West Virginia; **OIL GROUP:** The Preston Oil Company.

and miscellaneous $268,885. The expenditures represented completion of a five year $50,000,000 expansion and acquisition program. The tentative budget for 1955 construction totals $8,000,000.

VEPCO to Spend $53,000,000 On Construction in 1955

THE Virginia Electric and Power Company will spend over $53,000,000 on new construction this year, according to Vepco president, Jack G. Holtzclaw.

Included in the 1955 construction budget is $11,700,000 additional for the hydro development being built on the Roanoke river at Roanoke Rapids, N. C. and $7,300,000 for the completion of a third generating unit at the Possum Point power station near Quantico, Va.

Improvements to the present electric and gas properties and the extension of electric and gas services to new customers will cost almost $23,000,000, and $3,800,000 is to be expended for changes in the company's high voltage transmission network.

During the past seven years, Vepco has spent $293,000,000 on construction and it is expected that in the years ahead large annual construction expenditures will continue as the need for improved and expanded service increases.

G-E Appointment

O. B. FALLS, Jr., former manager of Electric Utility Sales for the General Electric Company's Apparatus Sales Division, has been named manager of the Atomic Power Equipment Marketing Study of G-E's Atomic Products Division, Francis K. McCune, vice president and general manager of the latter division, announced recently.

Mr. Falls also has served as manager of product sales of the G-E Pacific Northwest District at Seattle, Wash., and as a central station application engineer in the Pacific Northwest District.

J. W. Kepler Named Vice President Pittsburgh Consol. Coal

PITTSBURGH Consolidation Coal Company recently announced that its board of directors elected J. W. Kepler to the position of vice president—sales, effective April 1st. Mr. Kepler, who succeeds the late Harry S. Matthews, Jr., has been vice president and general manager of United Eastern Coal Sales Corporation in New York City. He will have offices in the Koppers building, Pittsburgh.

The directors also elected Joseph W. Oliver to the position of vice president—public relations and personnel, effective March 1st. Mr. Oliver has been assistant to the president and will continue in that capacity.

Central Hudson Gas & Elec. Increases Plant Investment to $100,000,000

CENTRAL Hudson Gas & Electric Corporation has increased its investment in utility plant from $42,000,000 at the end of 1945 to more than $100,000,000 at the end of 1954, according to Ernest R. Acker, president. Of this total $11,177,000 was expended for new facilities in 1954 alone, including the expenditures on two major projects, the completion of the $12,500,000 second unit of the Danskammer Point Steam Station and the establishment of an interconnection between the electric transmission system of the company and that of the Rockland Light and Power Company.

This announcement is under no circumstances to be construed as an offer to sell or as a solicitation of an offer to buy any of these securities. The offering is made only by the Prospectus.

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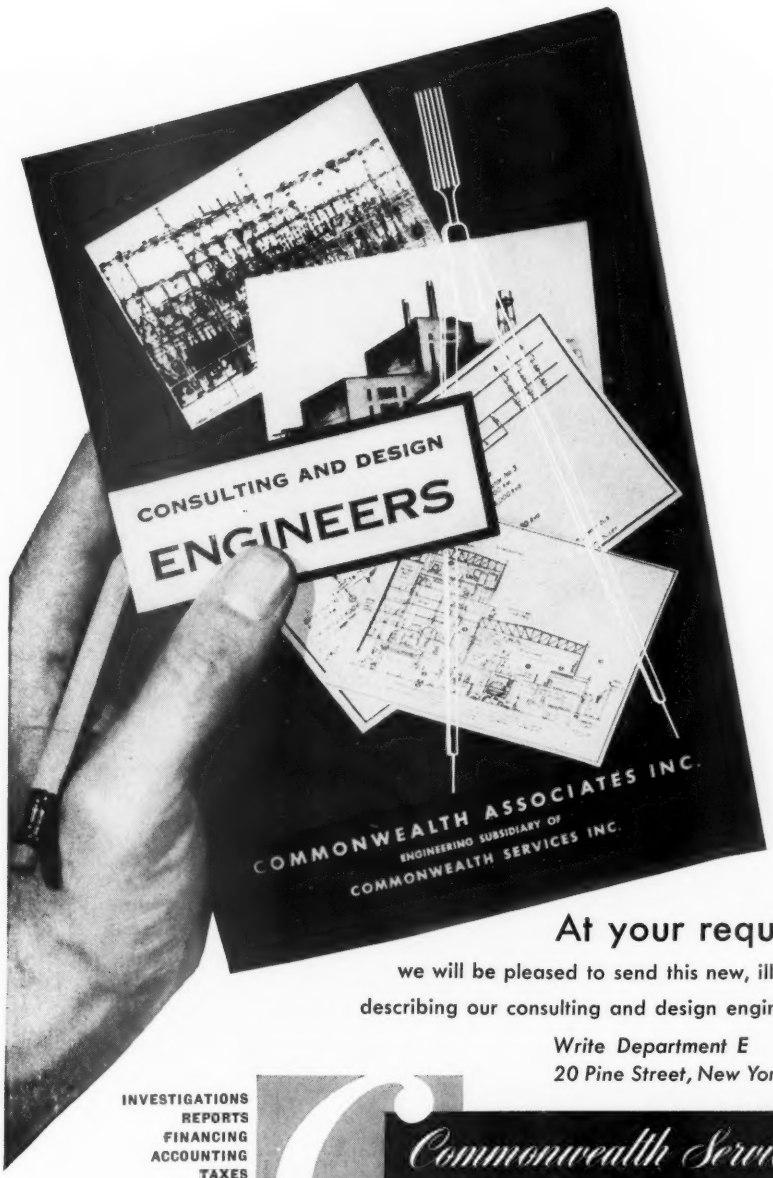

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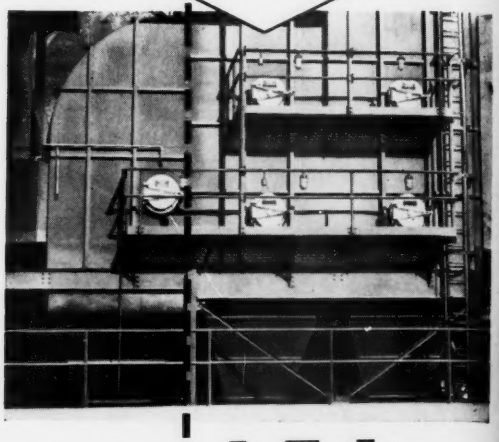

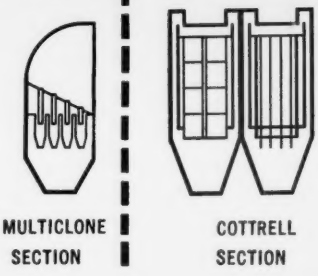

Inasmuch as most public utility power generating plants are located in or adjacent to metropolitan areas, the control and recovery of fly ash from stack gases is a particularly important problem. To assist power plants in solving this problem Western Precipitation pioneered, almost a half century ago, the first commercial application of the now-famous Cottrell Electrical Precipitator—and this type of equipment is still universally recognized as outstanding in its field.

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